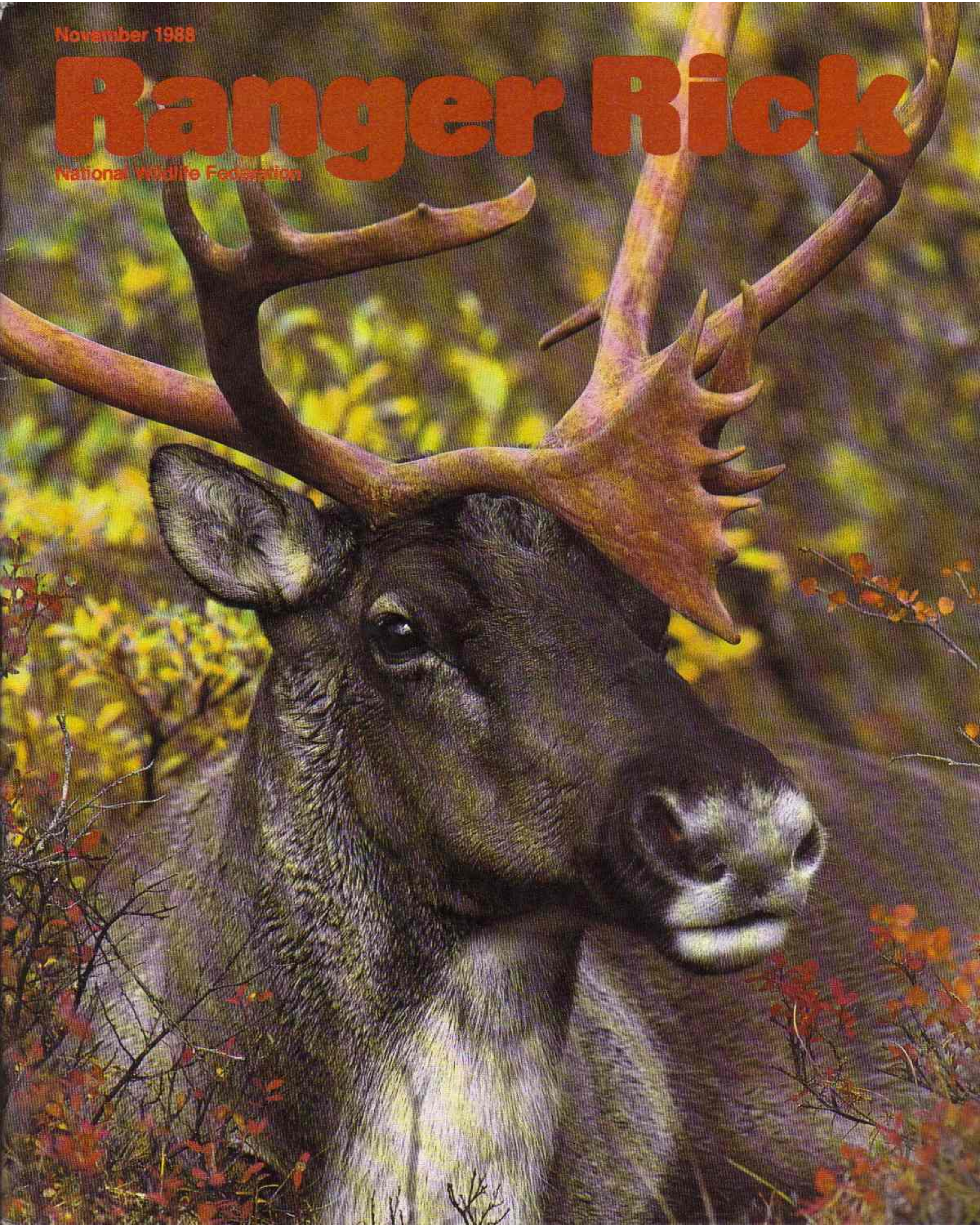
November 1988

Ranger Rick

National Wildlife Federation



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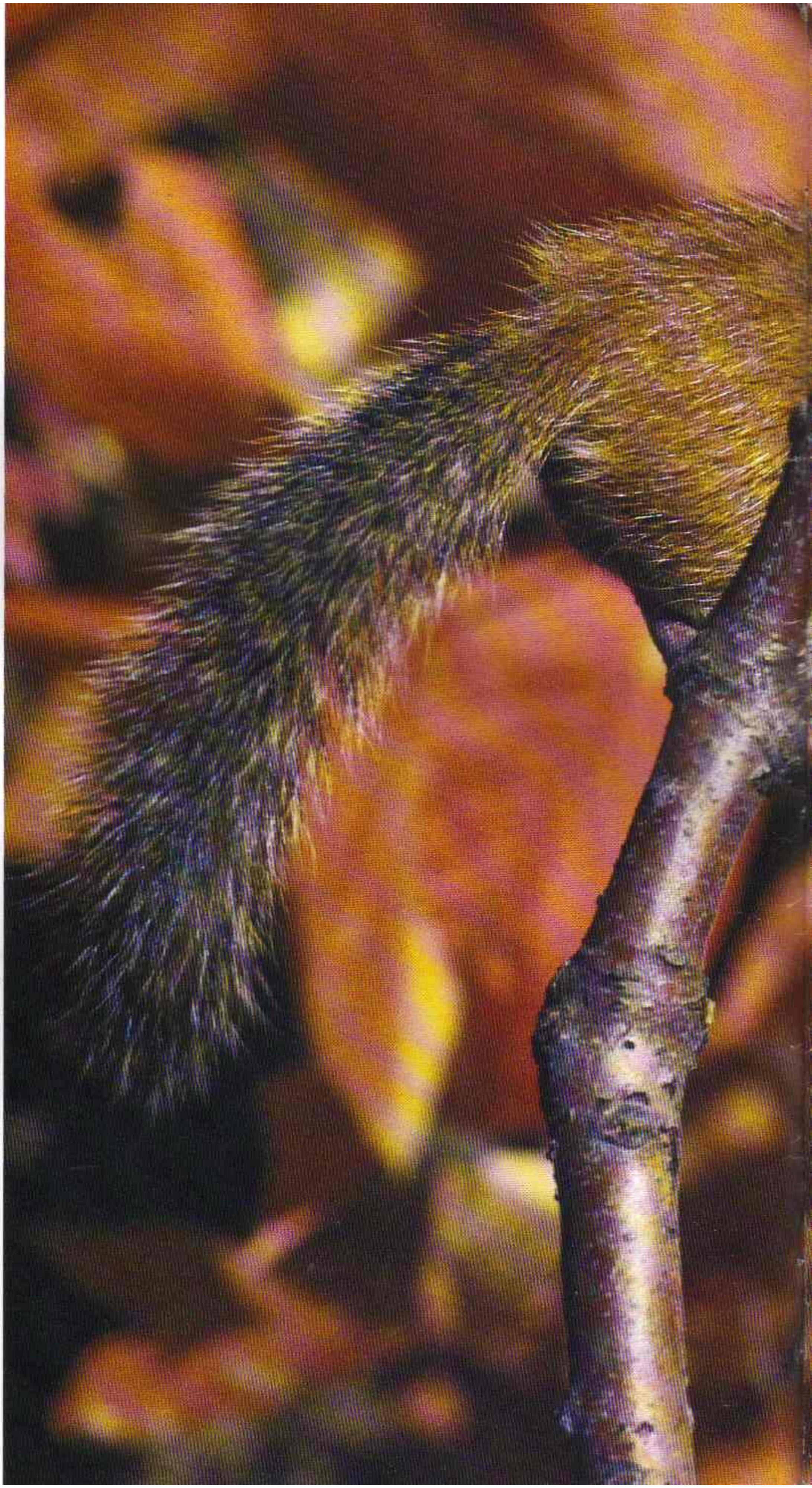
The Covers: Front—Kennan Ward; **Back**—John M. Burnley; **Page 3**—Paul E. Meyers



Stopping for just a second, this chipmunk will soon scurry off again to search for seeds. Find out more about one of these busy animals on page 39.

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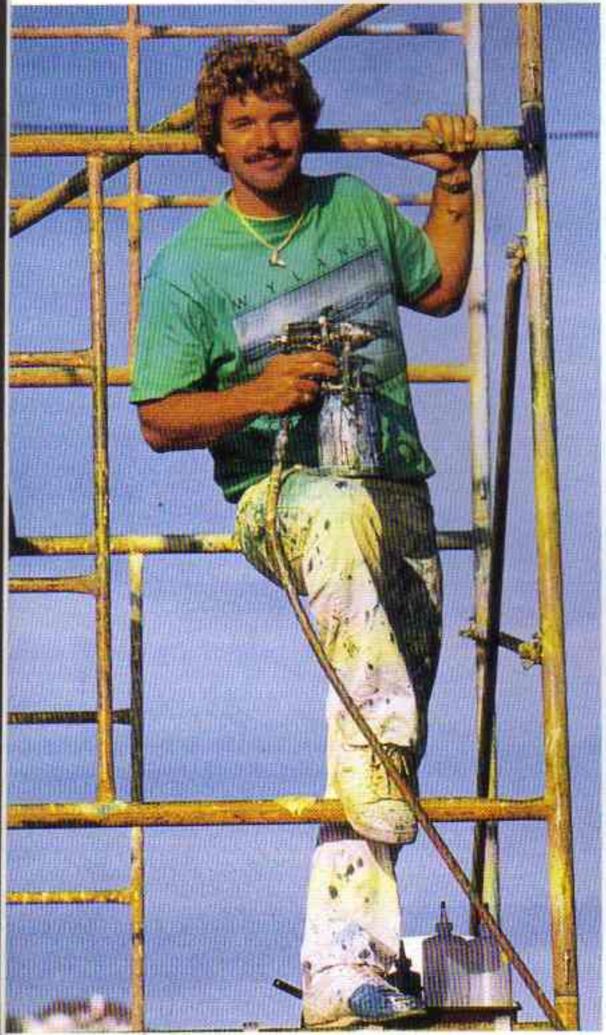
by Sallie Luther

Great Walls of WHALES

Wyland is an artist who's one of a kind, using an airbrush to spray paint lifesize whales on walls.



Ranger Rick Raccoon was in Honolulu, Hawaii, staring up at the biggest painting he had ever seen. It was huge. It was incredible. It covered the whole side of a 20-story building (**see photo on pages 6 and 7**).

"Wow!" said Ranger Rick. "Just look at those beautiful humpback whales!"

"I gotta admit they're pretty awesome," said someone right behind him. There, in paint-speckled clothes, stood a tall and tan young man.

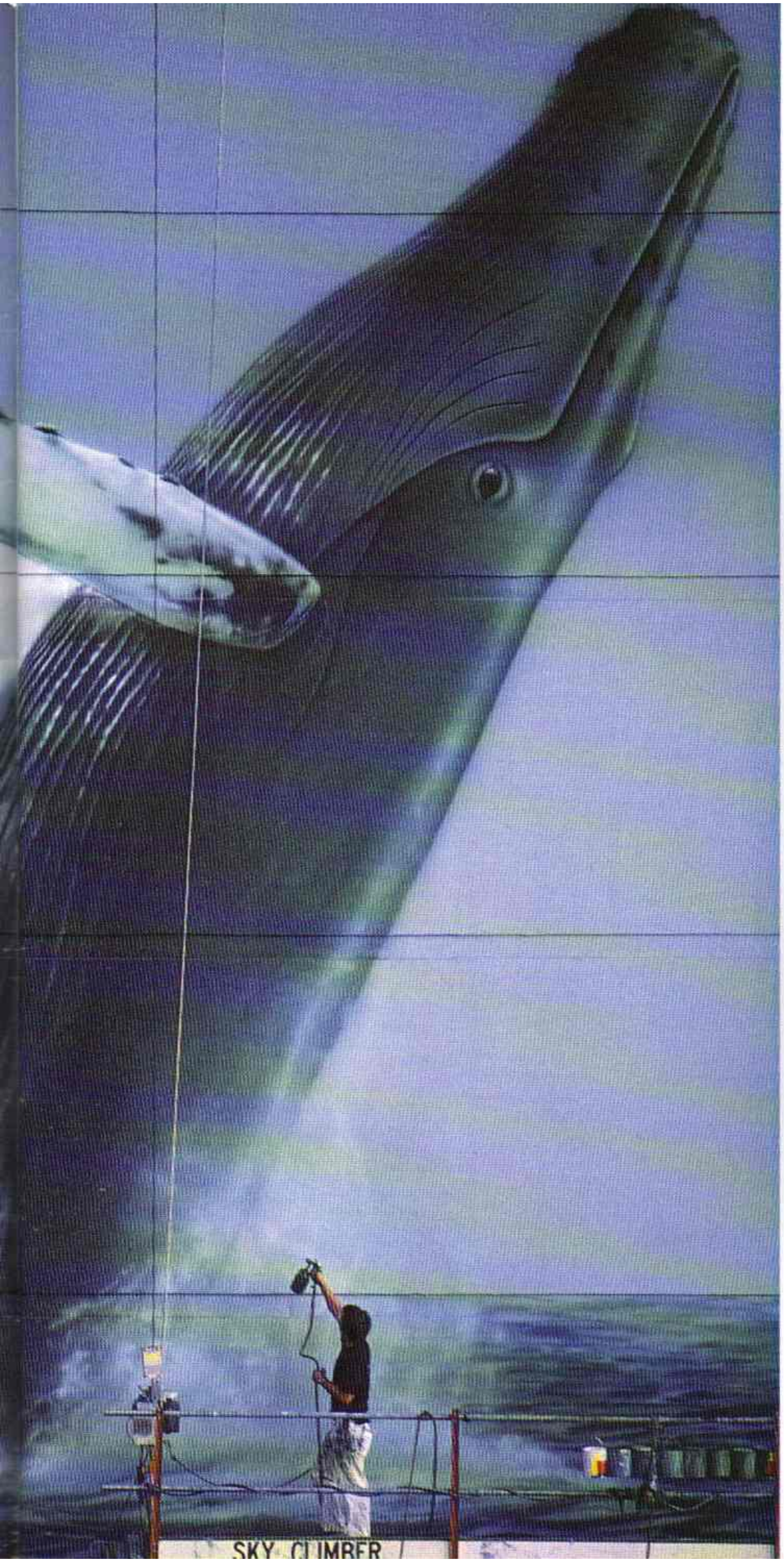
"Hi, I'm Wyland," he said. "And that's my painting you're looking at. It's the biggest one of its kind in the whole world, so I'm told."

"Wow!" said Rick again. He couldn't get over seeing whales so lifesize and lifelike.

"What a *great* story this would be for my magazine," he said to the artist.

"Why, thanks, Rick," said Wyland. "I've read your magazine for years. It would be great to be in it!

"Listen, I've got to do some touch-up work on that top whale. Why don't you come up on the scaffold with me and



we'll talk while I paint?"

"Uh—I'm kind of afraid of heights," said Rick.

"So am I," admitted Wyland. "But it's the only way I can get the job done." They rode the tiny *scaffold,* or platform, high into the air. And while Wyland added some details, they chatted about his work.

Rick: Were you born right here in Hawaii?

Wyland: No, Rick. As a matter of fact, I grew up in Detroit, Michigan. But I was always crazy about whales and other sea mammals. So I "dived" into libraries to learn everything I could about them. I also learned a lot from watching Jacques Cousteau's TV shows.

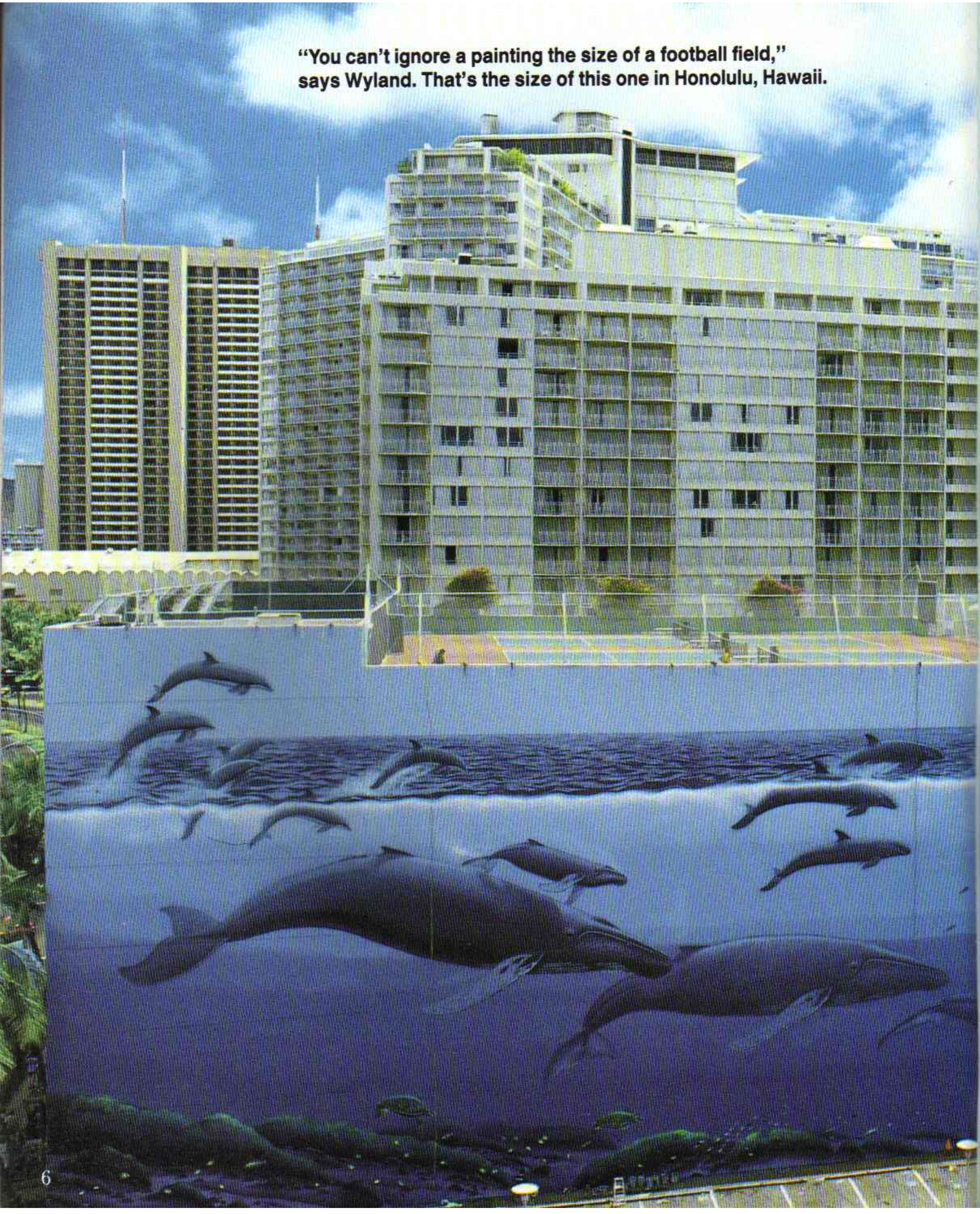
After I got out of school, I moved to California. And that's where I first saw gray whales swimming just off the coast. I knew right then and there that painting whales was what I wanted to do. Now I spend part of each year in California and part in Hawaii.

Rick: Did you ever paint anything else, Wyland?

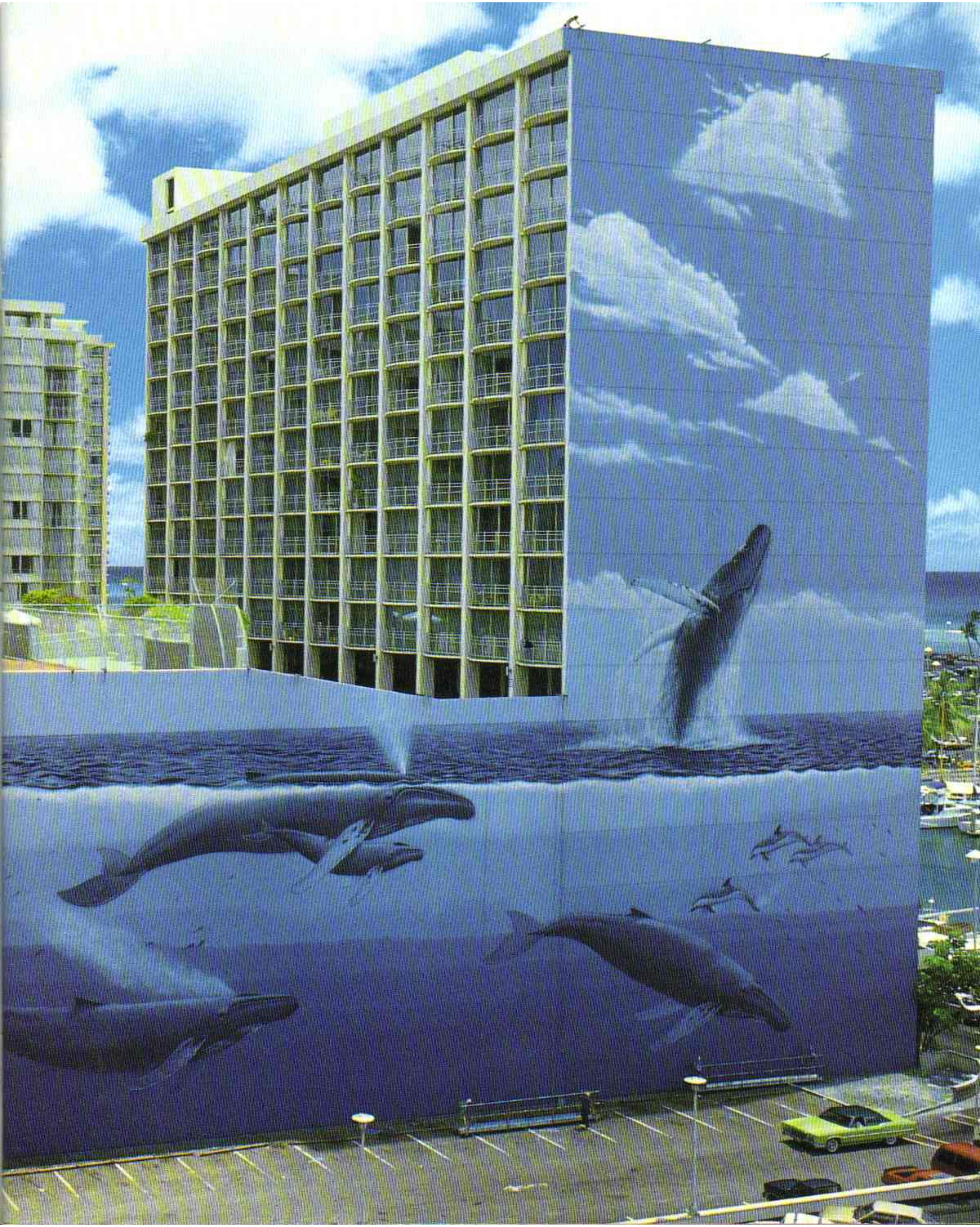
Wyland: As a matter of fact, I started out with dinosaurs. I really loved dinosaurs when

(Continued on page 8)

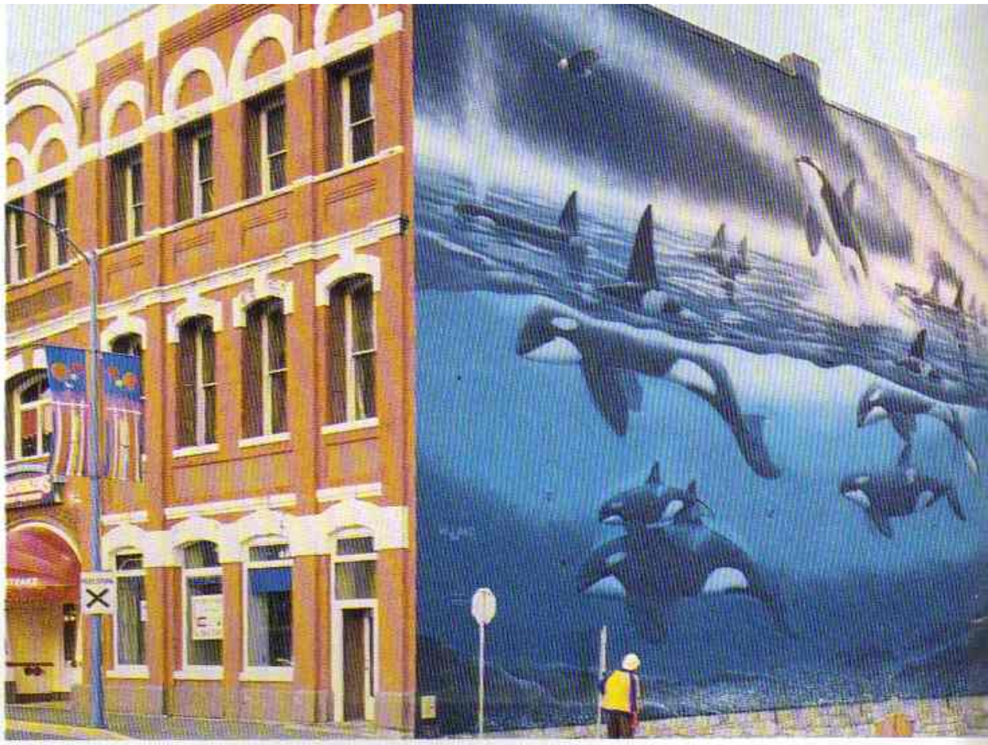
Working high above the ground doesn't seem to bother Wyland as he adds detail to a humpback. Can you find this whale in the photo on the next page?



"You can't ignore a painting the size of a football field," says Wyland. That's the size of this one in Honolulu, Hawaii.



Killer whales (right) and California gray whales (page 9) make buildings "come alive." Wyland paints whales so that people will stop and think about the many sea mammals that are endangered. And he's proving that *one* person *can* make a difference when it comes to helping wildlife.



I was little. When I was about four, I found some old house paints. Then I painted dinosaurs all over our basement walls. My mom said she knew I was going to be an artist when I grew up.

I was about 15 when I was asked to paint the side of an ice cream store. (I did a snowy mountain scene on it.) And I couldn't believe how easy it came to me. *Boy, is this a lot of fun!* I thought.

I was also working for a guy who did custom paint jobs on cars and vans. You know, the ones with scenes all over them? That's where I learned to do spray painting with a special tool called an *airbrush.* And it turned out to be perfect for the work I do now!

Rick: How do you know what to paint where? And how do you choose which building to do a painting on?

Wyland: Well, I just drive around cities until I see a big, blank wall that looks "right." It has to be large enough for life-size whales. It has to be where a lot of people will see it. And, of course, the owner of the building has to agree to let me paint on it.

Then I get a picture in my mind of what I want to paint, and I go to work. It just *comes* to me, and I get going.

First I cover the whole surface of a wall with blue, say. Then my painting seems to develop like a gigantic Polaroid snapshot: It just slowly grows, with more and more detail coming out in every layer of paint I add.

Rick: But how do you know it'll look right, when you're so close and it's so big?

Wyland: Well, I do have two kinds of built-in rulers. I know how long my scaffold is, so I use it as a guide. And, I'm six feet tall. So if I'm doing a 12-foot whale calf, for example, I know I have to make the painting "twice myself."

Rick: Did you ever have any problems doing any of your whale paintings?

Wyland: Oh, sure. Something really funny happened one time. I was trying to paint the tail of a whale on the first whale wall I did. But I just couldn't get it right. There was a little kid watching me—I guess he was about seven years old. He just stood there and stood there, shaking his head. Finally he came up to me and handed me a little piece of paper. *He* had drawn the whale's tail—just right!

But usually, my experts are a little older. I ask scientists who study whales and other sea animals to check out my art. I want to make sure it's right.

Rick: How do you pick which whales to paint, Wyland?

Wyland: I try to paint whales that live in the oceans nearby. When I was in British Columbia, for example, I did killer whales. When I'm in Hawaii, I paint humpbacks, and so on.

Rick: How many of these walls have you done so far?

Wyland: I'm working on Number 14 right now, and I hope to do 100, all over the world. I've already been invited to about 30 countries.

It doesn't take me very long to do a whale wall, maybe a few weeks at most. But I like to do a lot of scuba diving between doing paintings. I love to dive with whales—I just *love* it! Every time I stick my head underwater I learn more about them. It's awful that so many kinds of whales are in danger of becoming extinct!

Rick: I know, Wyland. I wish everyone could do something to help them survive.

Wyland: You know why I paint whales on walls, Rick? Whales are animals that most people are never likely to see. But having them painted *life-size* on walls makes them more real for people. You can't ignore a painting when it's the size of a football field. And that's my point: When people see my walls, they can't help but think about whales, alive and living in the sea—the way whales should be.

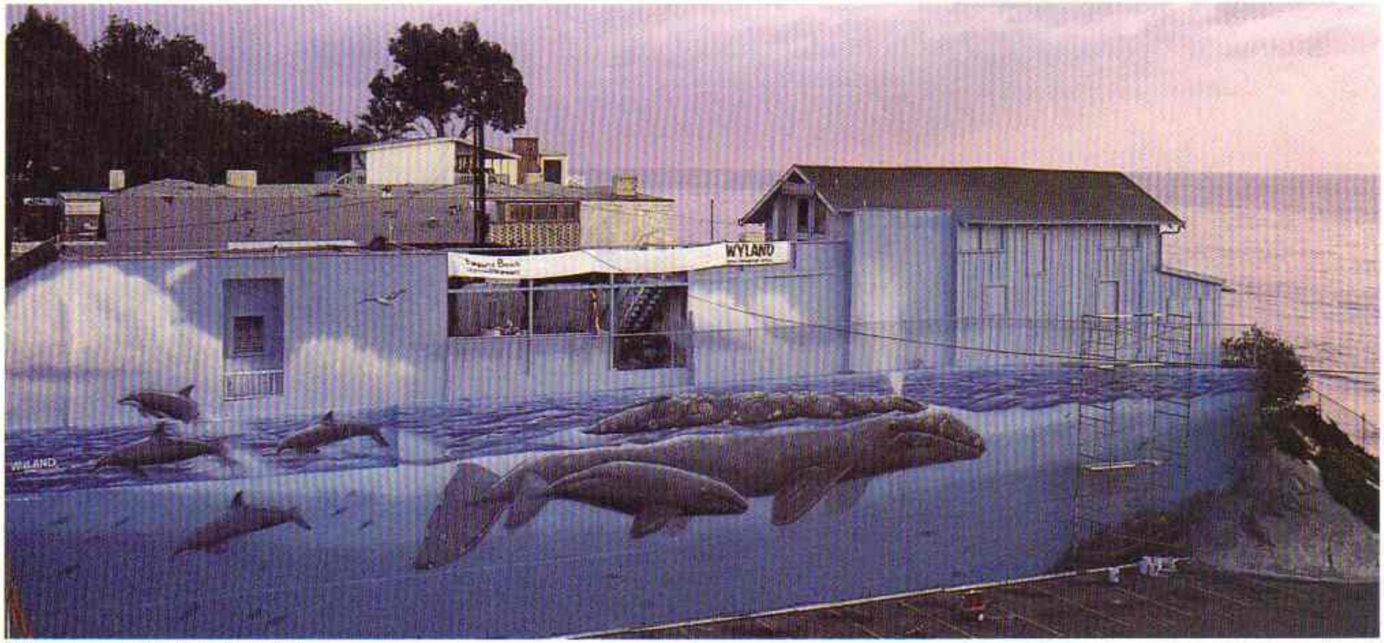
Rick: Do people pay you a lot of money for painting a wall?

Wyland: Not a penny, Rick. I *give* my whale walls to the cities or towns where I paint them. I call it "public art." For me, the joy is in the *doing* of these paintings. I have so much fun painting them, and I have so much fun watching folks discover them. It's just incredible. But mostly I want people to see whales as I do.

Lately, I've been painting whale walls in countries that still hunt whales. The people in those places come up to me and thank me for showing them what a *living* whale looks like. I can see them learning, right before my eyes.

Rick: Is there anything else you'd like to tell my Rangers?

Wyland: Rick, I think the most important thing of all is that *one* person *can* make a difference. You're making a difference with your magazine, and I'm making a difference with my art. If *each* of us can do something to help this planet we live on, then maybe things will get better for wildlife. And *that's* why I'll keep on painting whales on walls!



Photos courtesy Wyland Studio Gallery

Drawing by Lynn Munsinger

Who-o-o Knows?

Dear Wise Old Owl,

Are bats the only flying mammals?

Scott Parker
El Monte, CA

Yes, bats are the only mammals that can truly fly. They have real wings, which they flap just as birds do. Flying squirrels have loose skin along their sides that helps them glide through the air. But gliding doesn't count as flying.

Why don't snakes ever close their eyes?

Jeremy Kong; Denver, CO

Snakes don't have eyelids, so they can't close their eyes. But their eyes *are* protected. Covering each one is a hard, clear scale. When snakes shed their skin, these scales come off with it. They are replaced by new ones.

Does an elephant have bones in its trunk?

Richard Spiring; Montrose, PA

No, it doesn't, Richard. But an elephant's trunk *does* have 40,000 muscles.

An elephant's trunk is really a stretched-out nose and upper lip all in one. Elephants use their trunks to find food, gather it up, and stuff it into their mouths. They also suck water partway up their trunks. Then they squirt the water into their mouths if they want a drink. Or they spray it on their bodies if they want to cool themselves. Mother elephants use their trunks to pet their babies or to give them a spank when they do something the mothers don't like. (For more about elephants, see "Not-So-Little Squirt" in the July 1988 *Ranger Rick.*)

How do baby spiders know how to spin a web?

Jolie Lampkin; Suffern, NY

Nobody teaches a spider how to spin a web, Jolie. And it doesn't have to watch another spider to learn how. A spider doesn't think about what it is doing. It spins by *instinct.* When a spider spins, it is following instructions that are built into its brain. W.O.O.

About the Covers:

The *barren ground caribou* on the front cover eats leaves, lichens, and twigs. During the summer it lives on the tundra of the Far North. In winter it may trek hundreds of miles to find shelter in forests.

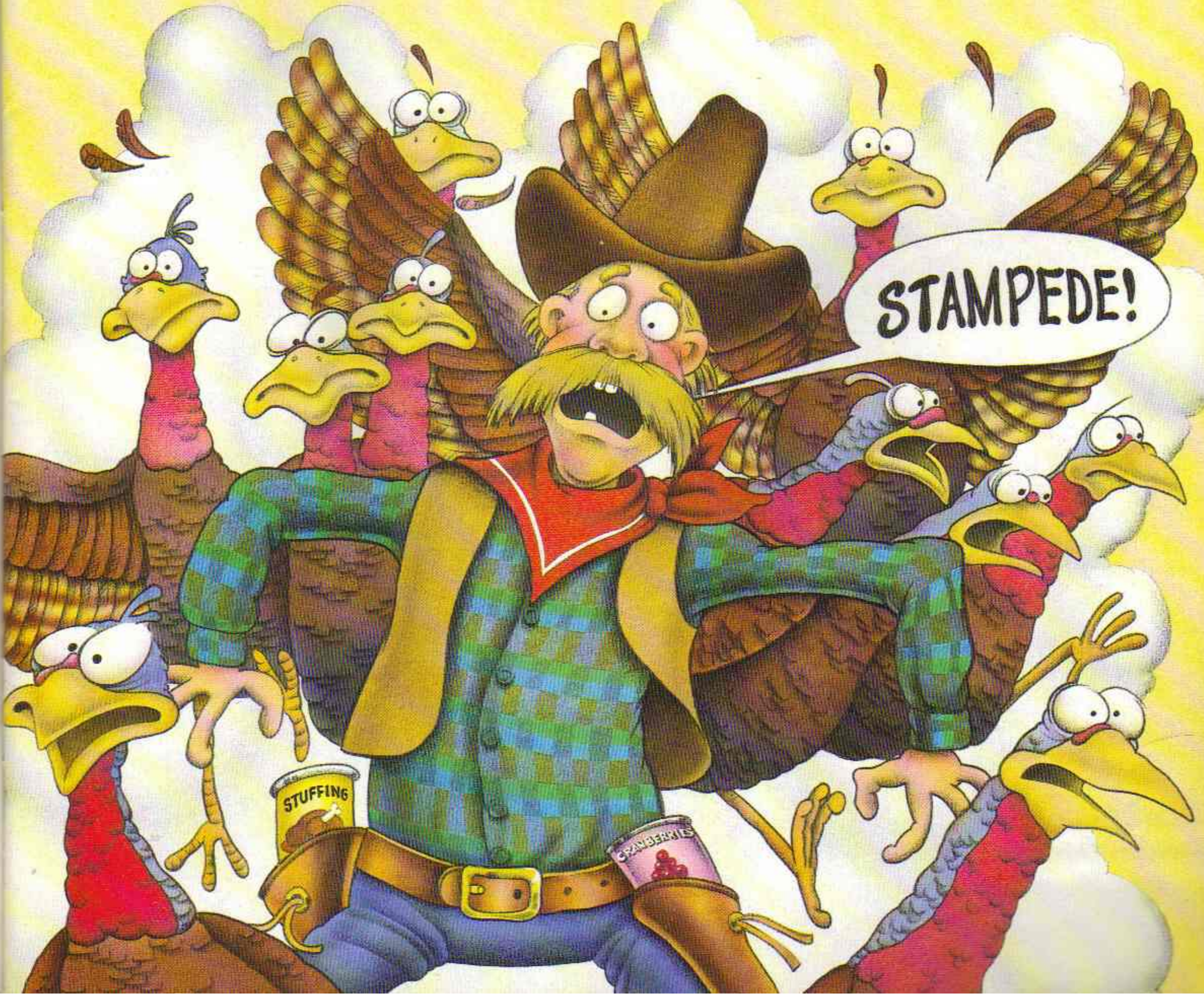
The *tiger salamander* on the back cover lives in the eastern half of the United States. It's about as long as this page is wide and eats earthworms, insects, and even small mice. When cold weather comes, it crawls into a burrow.

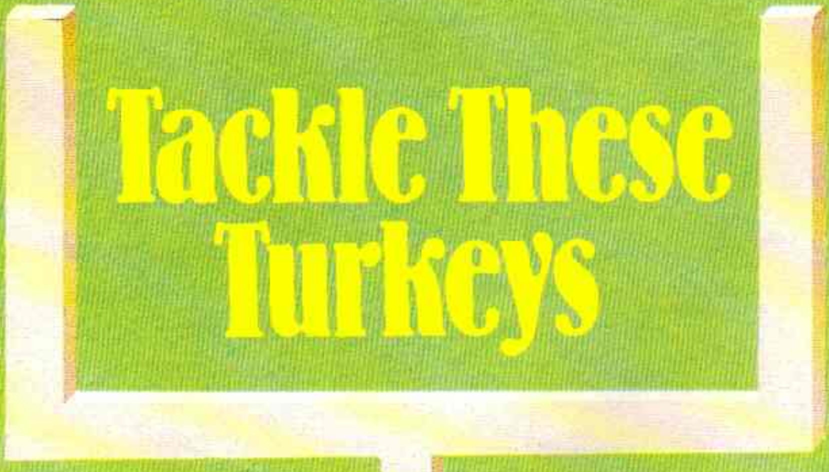
Git along little turkey

You probably know about the Old West cattle drives. But did you know that there were turkey drives as well? That's right! They were called turkey trailings. The last big drive was sometime around 1915.

Back then, turkey ranchers in many parts of the country allowed their birds to roam free. Then they rounded them up and carefully herded them to a nearby town. Great flocks of galloping gobblers became dinner for hungry people in many villages. One famous flock was driven from California across the Sierra Nevada Mountains to Carson City, Nevada!

Pretend you're driving some turkeys to town before Thanksgiving. This drawing shows what might happen if they find out what's in store for them. —Sally Ann Coggin





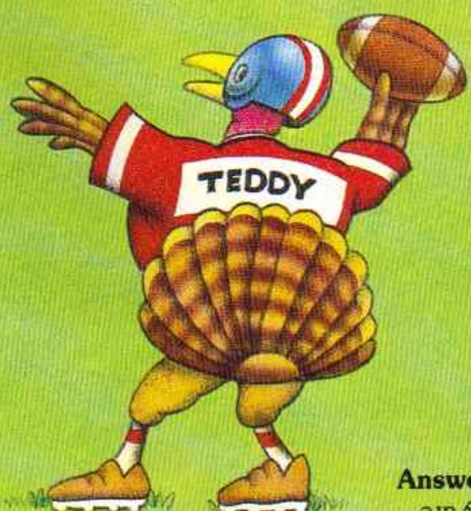
Tackle These Turkeys

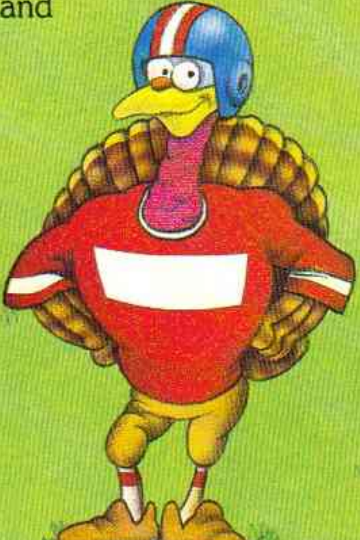
by Claire Miller

These turkeys are so tough that no one would want to eat them on Thanksgiving Day. They're getting ready to start their big football game. But first they need you to write their names on their jerseys. Tackle the clues to figure out who's who.

(Answers below)

- The twins, **Taffy** and **Tuffy**, are next to each other. Tuffy is on Taffy's right. Taffy is straight across from **Teddy**, the quarterback.
- **Tiger** is next to Teddy but not next to Tuffy.
- **Tussle** is straight across from **Tarzan**, and Tarzan is not next to Teddy.



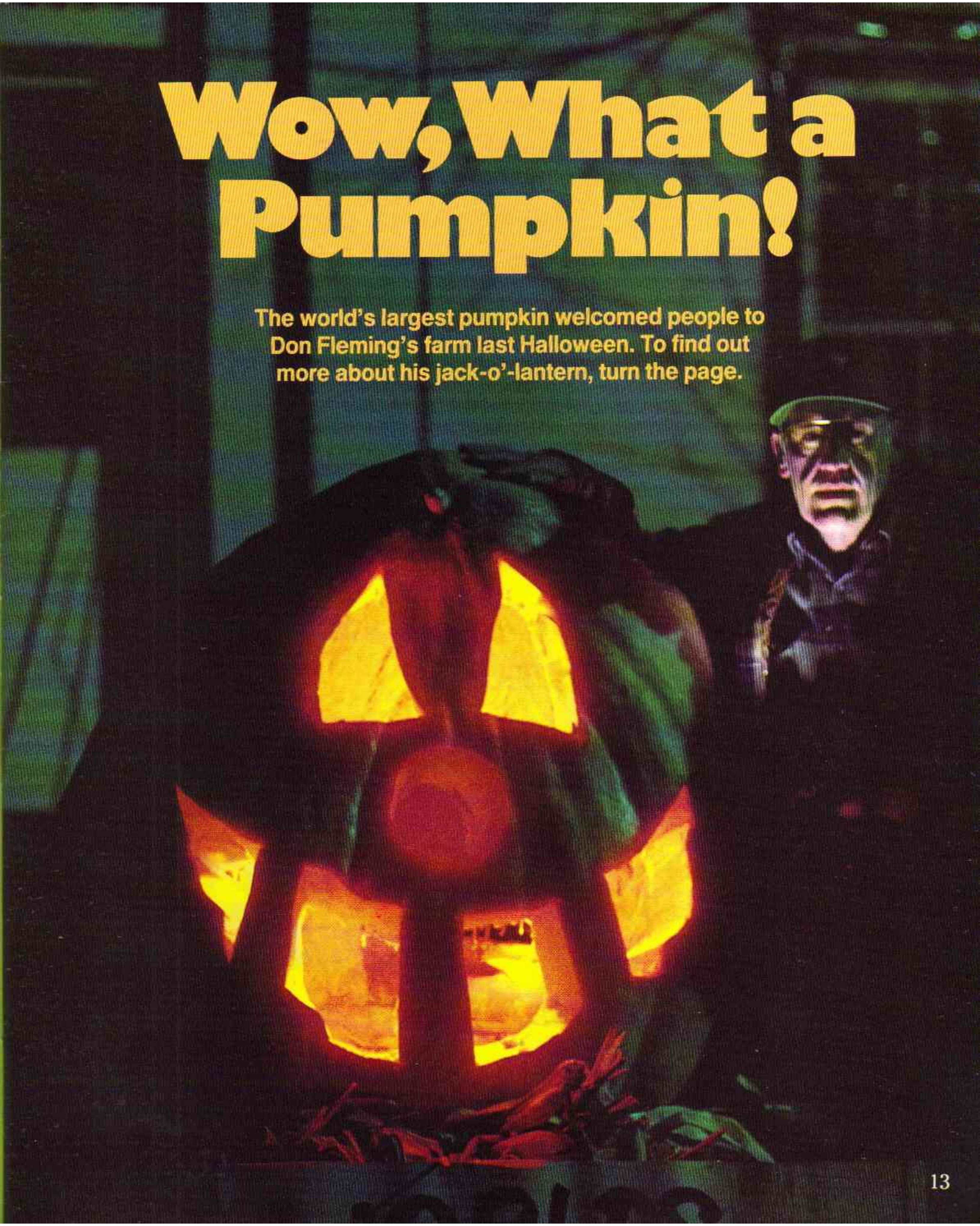


Answers: Going around the circle to the left of Teddy are Tussle, Tuffy, Taffy, Tarzan, and Tiger.

Drawings by Pidgeon

Wow, What a Pumpkin!

The world's largest pumpkin welcomed people to Don Fleming's farm last Halloween. To find out more about his jack-o'-lantern, turn the page.



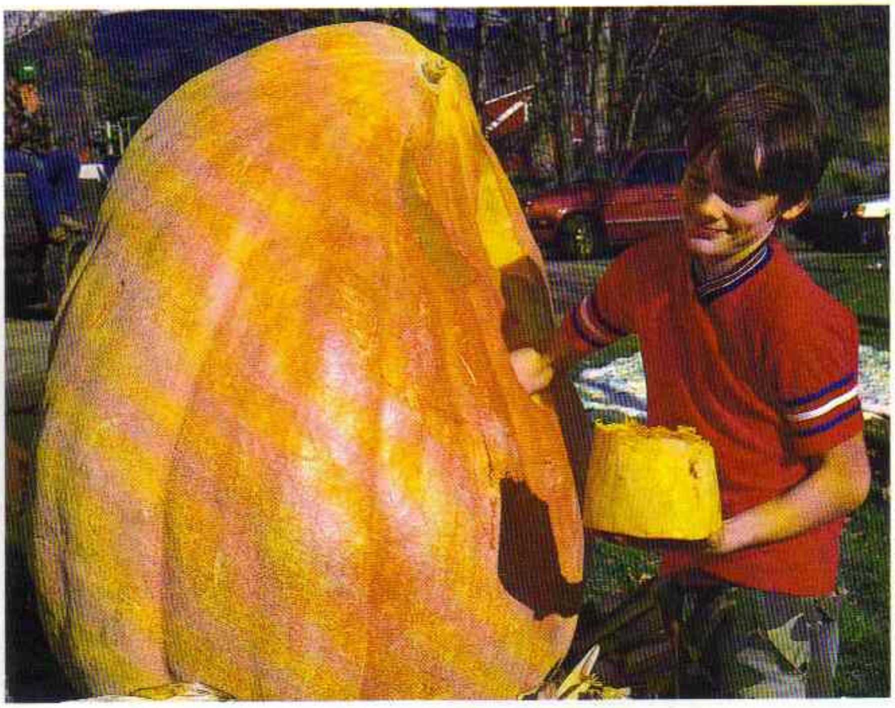
At 604½ pounds (272 kg), Don Fleming's giant pumpkin was declared the 1987 world champ by the World Pumpkin Confederation. He had grown a pumpkin that was heavier than any other pumpkin they found—and they looked all over the world! After the contest was over, Don decided to make the pumpkin into a giant jack-o'-lantern. It was just right for brightening up Halloween night on his farm in Vermont.

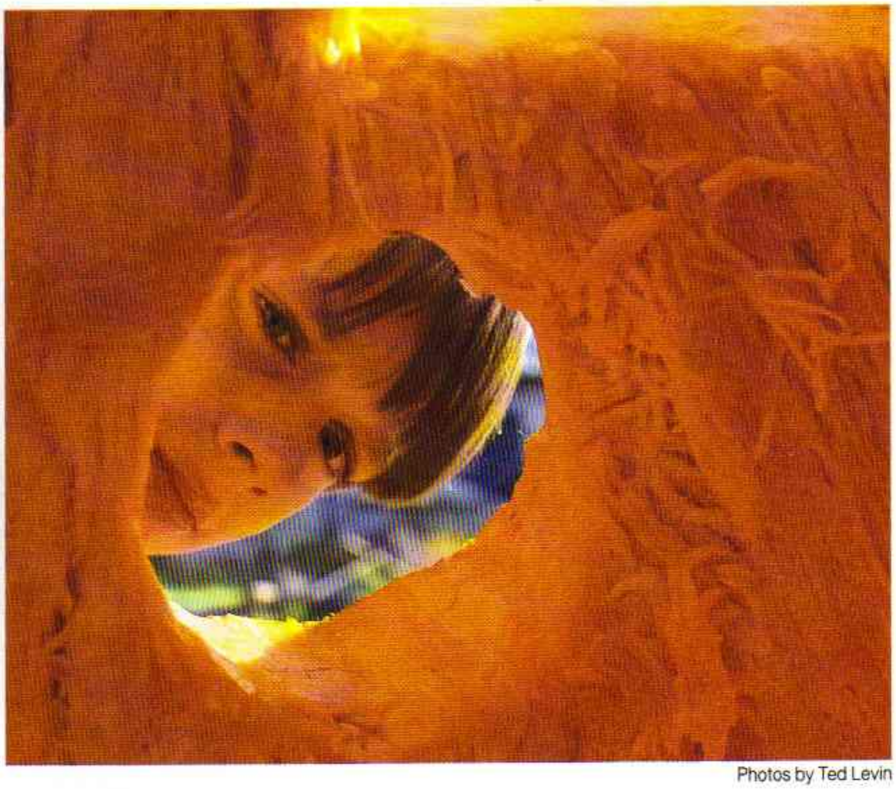
Don's neighbor, Doug Small (photos at right), helped carve the pumpkin. He used the largest knife he could find, but carving the super-thick pumpkin was a tough job! When he pulled out the piece of pumpkin "nose" (top photo), Doug was amazed—it was over six inches (15 cm) thick and as heavy as a small watermelon. Three hours later, Doug was ready to put the final touches on the jack-o'-lantern (photo at far right).

Kids got a big surprise when they came to see the giant pumpkin. They could climb *inside* to get a jack-o'-lantern's view of the world. And everybody had fun thinking about the 400 pies the world's heaviest pumpkin could have made!

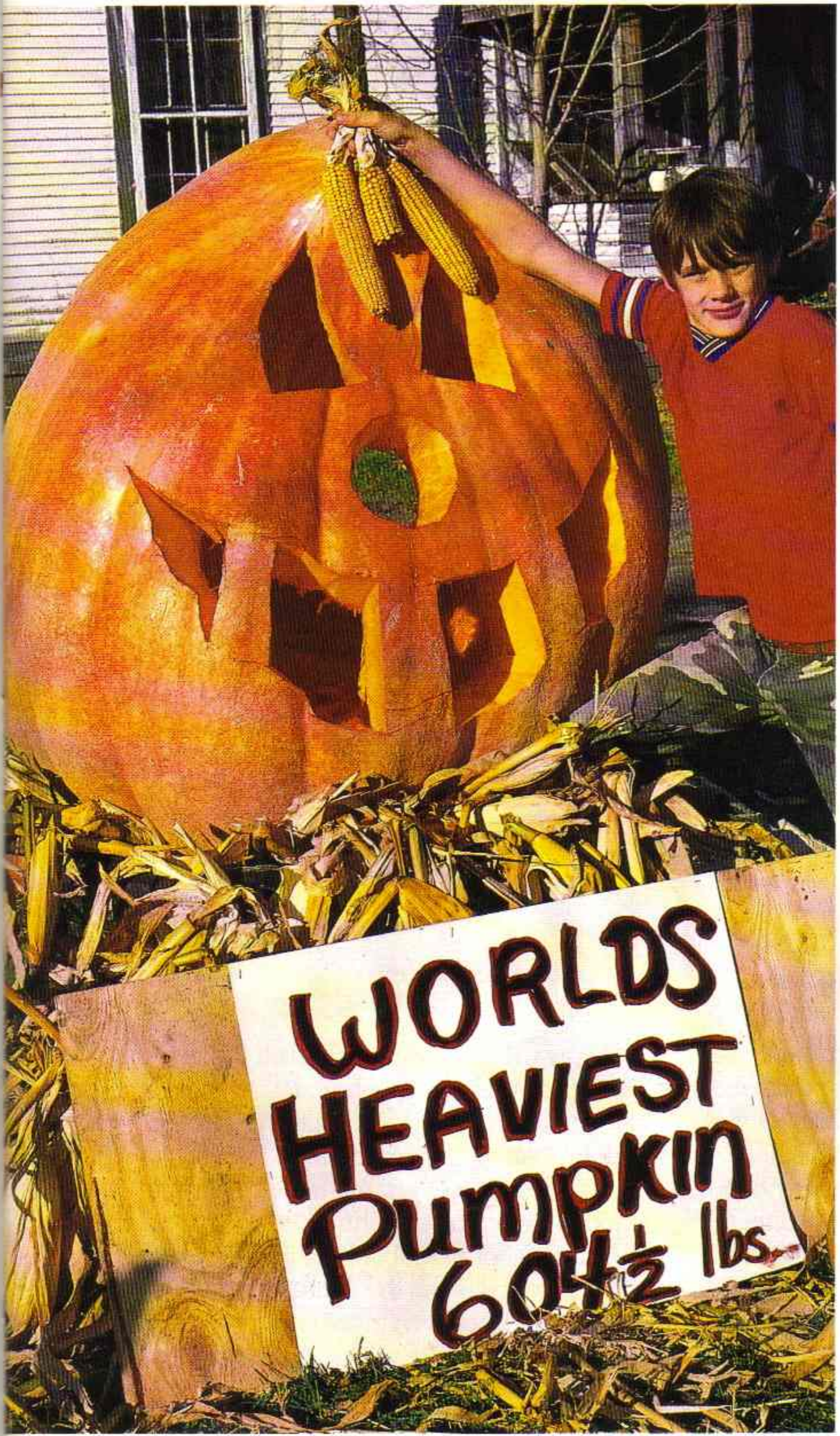
—Carolyn Duckworth

Carving the nose (below) was just the start of Doug's giant job. Three hours later, a photographer snapped his photo from inside the finished jack-o'-lantern (bottom). Then Doug added one last touch—a corn "hat" (right).





Photos by Ted Levin



Perfect Pumpkin Bread

You don't have to wait until Thanksgiving Day for that good pumpkin taste. You can try baking pumpkin bread right now. It's loaded with all the spices that make pumpkin pies so delicious.

What to Do:

1. Stir all these ingredients in a big bowl until well mixed:

1⅔ cups unbleached flour
1½ cups sugar
1½ cup whole wheat flour
½ cup vegetable oil
2 eggs
1 cup canned pumpkin
½ cup water
1 teaspoon baking soda
¼ teaspoon baking powder
¼ teaspoon cloves
¼ teaspoon nutmeg
½ teaspoon cinnamon
⅔ teaspoon salt
½ cup chopped nuts
½ cup raisins

2. Pour the mixture into a well-greased bread pan.
3. Bake at 325° for about an hour and a half.
4. Stick a toothpick down into the middle of the bread. If the toothpick comes out dry, the bread should be done.
5. If the bread is sticking to the sides of the pan, loosen it with a knife. Turn the bread pan upside down and tap the bottom.
6. When the bread is cooled, cut it into thin slices and serve with butter or honey.

Adventures of Ranger Rick

Story by Sallie Luther
Drawings by Alton Langford

Scarlett Fox scampered forward, then quickly backward on the dipping, darting surfboard. She bobbed and wobbled as a giant wave's crest of wild white water curled above her.

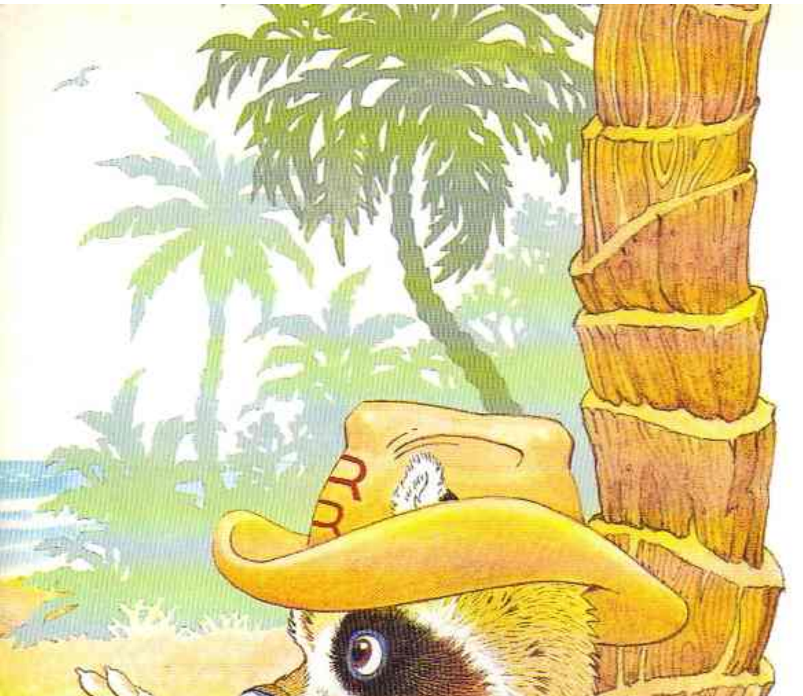
"Ya*hoo!*" Scarlett squealed. Then her board knifed downward and across the long green side of the racing, foaming wave. Scarlett rode the wave until it broke near shore. Then she hopped off her surfboard and dashed up the beach. She now knew one thing for sure: She was glad she had come to the west coast of Costa Rica.

"Way to go, Scarlett!" cheered Ranger Rick Raccoon, waving to his friend.

"Pretty good for a first-timer," chuckled Cubby Bear, clapping his paws.

Boomer Badger just muttered to himself, "I thought we came to Central America to meet Willa Bee, not to fool around in the water." Boomer liked being the center of attention himself. He was even more grumpy than usual when someone else was getting any glory.

"Dumb old silly surfing," he mumbled, poking through the picnic basket. "Hey!" he



called to no one in particular. "Who ate the last of the biscuits and honey? Cubby . . . *Cubby!*" he screeched. (*Now* Boomer had everyone's attention.) "It was *you,* right?"

"Well, ex-cuooooze *me,*" Cubby called back. "But who gave *you* dibs on them, anyway?" Cubby walked over to Boomer while Rick helped Scarlett beach the surfboard.

"Don't get so upset, Boomer," Cubby said. "*I* made those biscuits. And *I* found the wild bees' honey. So if you want some more, why don't *you* do some work for a change?"

"Make biscuits, yes—find honey, no," answered Boomer. "I'm not going near those stingy, zingy bees."

"What are a few bee stings?" said Cubby. "But OK, if you do the biscuits, I'll get the honey." With that, Cubby picked up Boomer's red sand bucket and scuffed off down the beach.

"Big deal," mumbled Boomer. "He'll just walk up to Willa Bee's hive in a tree and ask for the honey."

"Who's Willa Bee?" asked Rick. He had come over to see what the fuss was about.

"That bee we're supposed to meet down here," said Boomer. "Don't you remember? Or is that old hat making your brain moldy?"

A blank look crossed Rick's face. Then he broke into a wide grin.

"You've got it a little wrong, Boomer," chuckled Rick. "It's *killer* bee, not *Willa* Bee. We came here to check out *killer* bees."

Just then someone spoke from overhead. "They don't really deserve that name, you know. They're just bees that are really fierce about protecting their homes, that's all." It was a bird with a big, brightly colored beak. She sat on a long limb overhanging the beach. "By the way, I'm Tammy Toucan," she said, "and I can tell you a thing or two about those bees."

"Please do," invited Scarlett, who had just walked up. Tammy flew down to join the friends. She explained that in 1957, scientists had brought some African honey bees into the South American country of Brazil. They hoped to mate the hardier African bees with regular honey bees and get a new kind of bee. The new bee, they thought, would make lots of honey.

But the scientists didn't realize that African bees were so fierce. Later some of the African bees escaped. Then they mated with wild honey bees and formed new, fiercer swarms. These half-and-half offspring were named *Africanized* bees. And they started to spread like crazy. In just 30 years the bees had spread from

Brazil all the way to southern Mexico!

"People have made some fakey-scary movies about the bees," Tammy said, finishing her story. "And everyone took to calling the Africanized bees 'killer' bees. But if you saw one in your garden, you wouldn't be able to tell it from any other honey bee. If anything, it's a bit smaller. And its poison isn't one bit more poisonous than a regular honey bee's."

"But they *have* killed, haven't they?" asked Scarlett. "Lots of animals, I hear, and even some people."

"True," answered Tammy. "The bees are *really* fierce around their hives. They attack in a flash too, and by the thousands. It's the *number* of stings that kill, I'm afraid."

And almost as if in echo of her words, a scream ripped through the forest:

"A-a-a-a-a-a-a-g-g-g-hh!"

"Someone's in big trouble!" cried Scarlett.

"And it's over near the killer bees' tree," said Tammy. "You'd better follow me—fast."

The toucan took to the air, flashing down a deeply shadowed path through the forest. Rick and Scarlett followed as fast as they could, ducking and dodging through the vines and leaves. Boomer stayed put, digging a hole for safety in the sand as fast as his feet could dig.

The friends quickly reached an old dirt road. There, lying on the ground in the distance, was something large, dark, and roundish. It could have been an animal all curled up. But it was so covered with angry bees that it looked like a fuzzy, buzzy ball. There were hundreds—thousands—of attacking bees, each trying to give the "something" a poisonous poke.

"Oh, no, Rick. Look!" gasped Scarlett. There, near the base of the bees' tree, lay a little red pail. It was the pail that Cubby had taken with him to collect the wild honey.

The fox and raccoon looked again at the thing being stung. And they felt growing horror as they realized that it might be Cubby. He must have mistaken the killer bees' tree for a tree belonging to regular honey bees.

"We can't just stand here doing nothing," cried Rick.

"We've got to help him," cried Scarlett.

"No, no, you can't!" cried Tammy. "It's too late! If that's your friend, he's probably already dead. You'd just die too."

The friends turned to run. Then they heard a soft whisper close at hand: "*Pssst,*" someone hissed. "*Pssssst!*"

They whirled to see two ears, the top of a head, and two eyes peeking through the window of an old abandoned car. It was Cubby! His face was covered with lumps and bumps from bee stings. But he was OK.

"Get in here quick," he whispered, opening the door just a little. "Those nasty bees might come after you too!"

The three animals slipped into the car, made sure the windows were all rolled up, and began happily hugging their still-alive friend. While waiting for darkness, when the bees would calm down, Cubby told his tale:

He had forgotten where he had found the first honey bees' tree, so he was just wandering along the old, overgrown roadway. Then he heard bees buzzing up ahead. He followed the sound and soon saw them flying in and out of their tree. He had begun to drool at the thought of the sweet honey that might be waiting for him inside.

"But before I even got close to their hive," Cubby explained, "the bees got so angry that some jumped me and started stinging.

"I took off running as fast as I could go. And those buzzing bullies were right behind me. Then I saw a tire lying here beside this car. So I grabbed it and rolled it toward their tree. Lucky for me, they thought the tire was some kind of enemy. They zoomed in on *it* and gave me a chance to hide in here. This old rust-bucket saved my life!" he added, patting the car's tattered and torn seat covers.

As night was falling, the friends slipped safely away. By the time they got back to the beach, Boomer was worried sick. And after hearing Cubby's tale of terror, Boomer was shocked into silence. He didn't even fuss about losing his little red pail or about being hungry. In fact, the badger was feeling guilty about Cubby's bad day. If he hadn't been such a grump, the bear might not have gone out after honey and gotten into trouble.

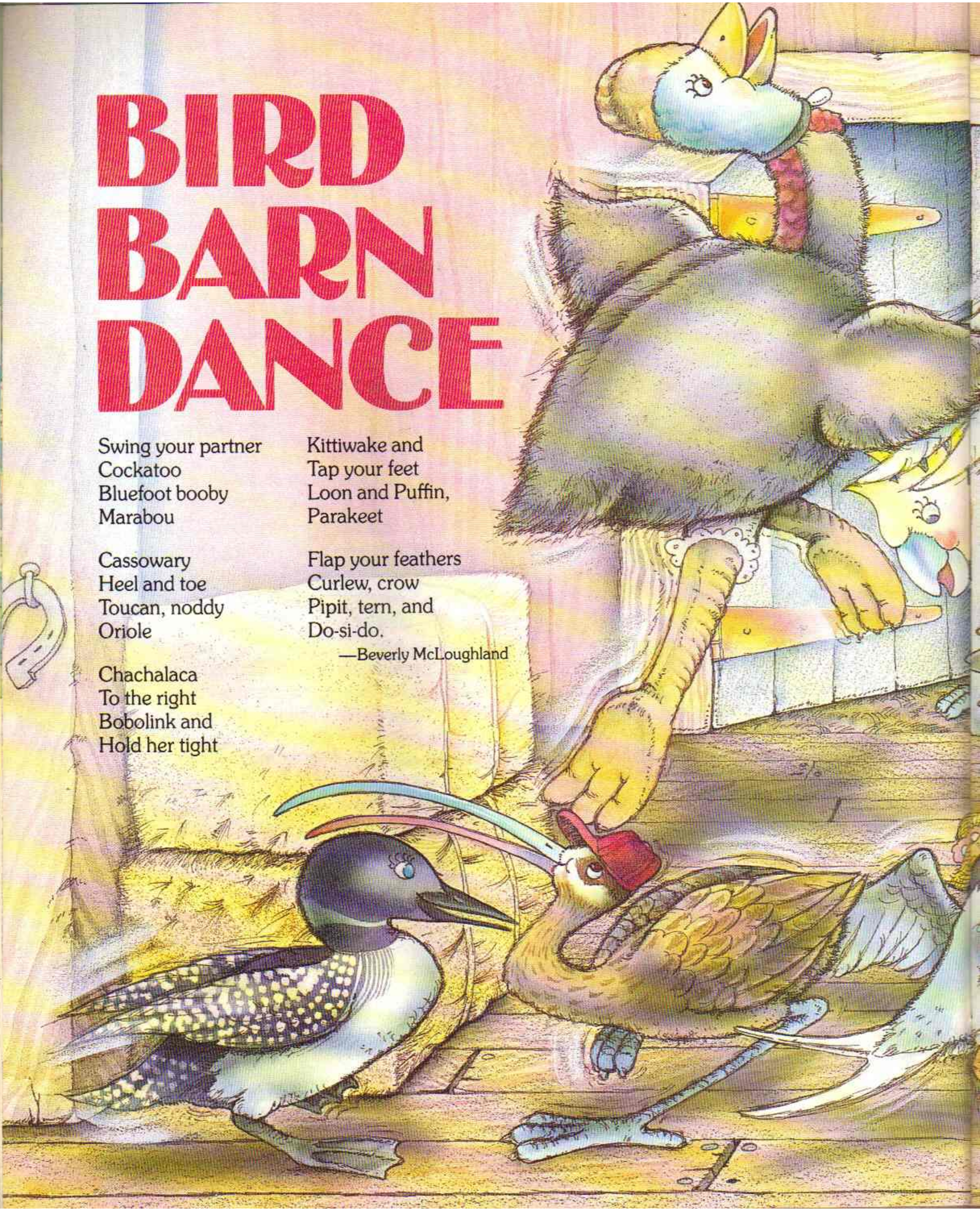
A little later he went over and plopped down beside his pal. A wicked grin was beginning to twitch around the edges of Boomer's mouth.

"You know those extra biscuits I baked, Cubbo?" he asked. "Well, there are still some left, and you can have 'em. But you know what? I do *bee*-lieve they'd taste better with a little honey on 'em. Know where we can find any nice, gentle bees?" He gave Cubby a friendly poke with an elbow, and the two began to wrestle and tussle in the warm Costa Rican sand.

Rangers: "Killer," or Africanized, bees are still on the move north and have reached the southern part of Mexico. Many scientists think they will reach the southern part of the United States within the next few years.

If the bees *do* get here, no one is sure what will happen. They may become tamer, like our regular honey bees, after mixing with the millions of honey bees in North America. Or the "killers" may stay fierce and cause trouble for people who raise bees and sell honey. We'll keep you posted! *R.R.*

BIRD BARN DANCE



Swing your partner
Cockatoo
Bluefoot booby
Marabou

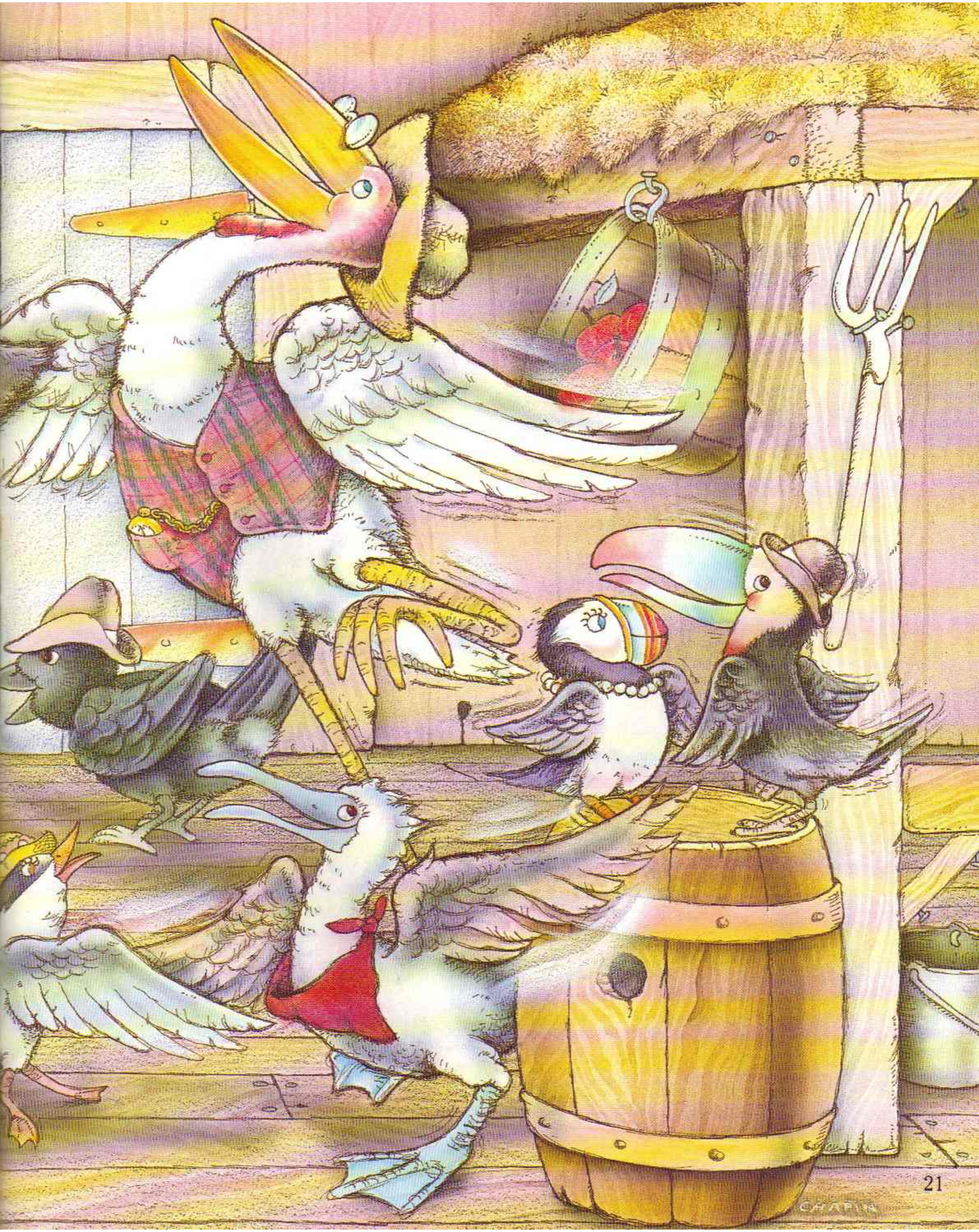
Cassowary
Heel and toe
Toucan, noddy
Oriole

Chachalaca
To the right
Bobolink and
Hold her tight

Kittiwake and
Tap your feet
Loon and Puffin,
Parakeet

Flap your feathers
Curlew, crow
Pipit, tern, and
Do-si-do.

—Beverly McLoughland


CHAPIN

Lightfoot

Life is full of danger for young pronghorns. But it's also full of adventure! Lightfoot would find that out for himself.

by Diana Stratton

The late May sun beat down on Wyoming's sagebrush plains. It was slowly getting warmer, but snow from a recent storm still blanketed nearby mountains.

High above the plains soared a golden eagle. She dipped low over the hills, her sharp eyes searching for a meal. A ground squirrel would do nicely. So would a jackrabbit . . . or a newborn pronghorn like Lightfoot.

Far beneath the eagle, Lightfoot lay motionless against the ground. His ears were pressed flat against his head. He didn't even blink. There were only some small plants and his stillness to shelter him from the sun, or the wind, or the eyes of predators.

The gray-tan fawn blended perfectly with the background. The eagle flew on, its shadow passing right over Lightfoot. The little pronghorn was safe, for now.

The fawn stirred just a little. He was hungry. Where was his mother, Lightning? He lifted his head cautiously to look around.

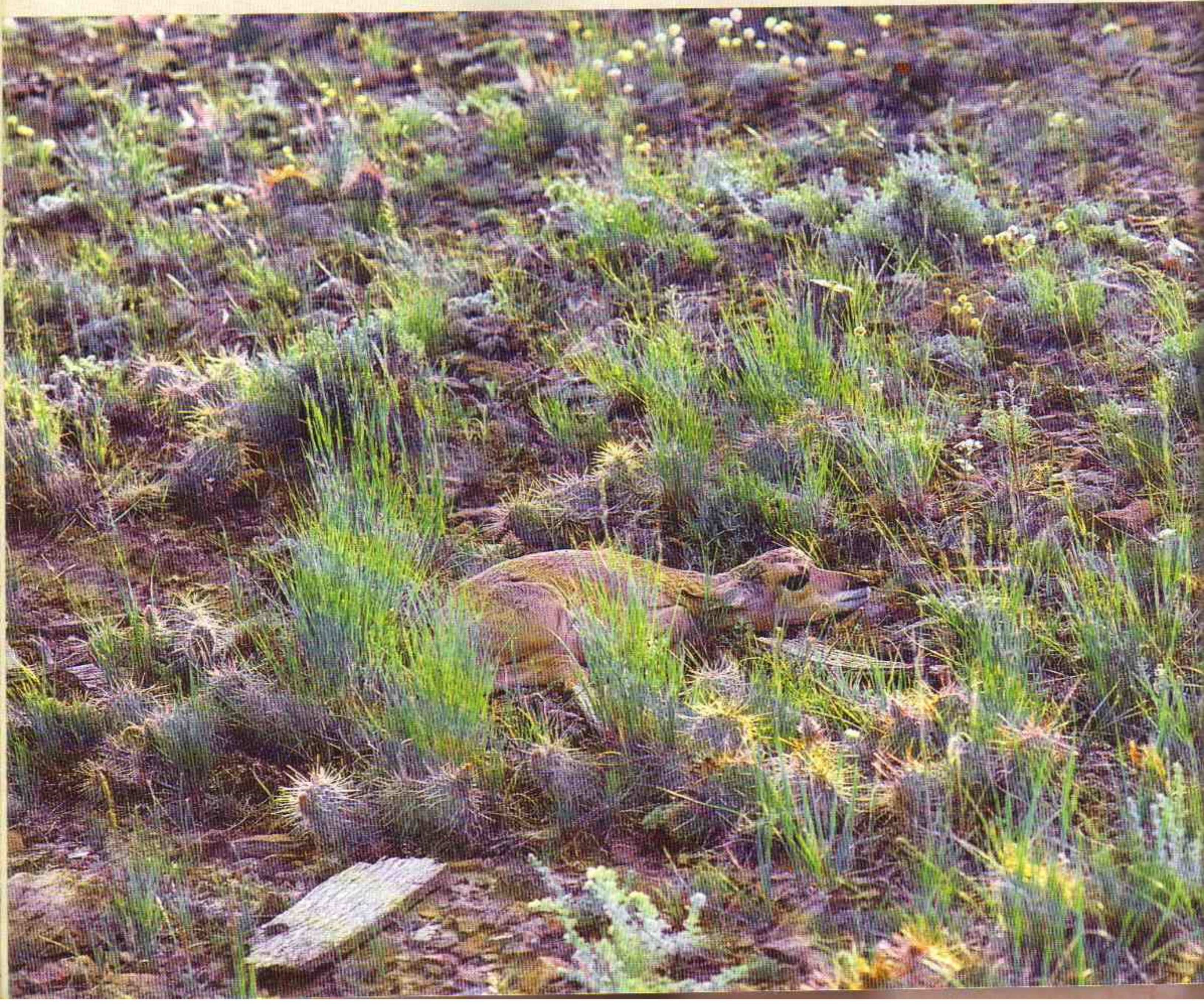
Grows Up

By hunkering down and not moving a muscle, Lightfoot (below) escapes the eyes of enemies. His gray-tan color and lack of almost all odor help him stay hidden.

Lightning was two hilltops away, and she had spotted danger. A coyote was trotting through the sagebrush, its keen nose pressed to the ground. The coyote was tracing the fresh scent of a jackrabbit. She had a litter of hungry pups to feed. A pronghorn fawn would make a meal for them too. But unless she stumbled onto Lightfoot, he would be safe from her. Newborn pronghorns have little odor to give away their hiding places. The coyote trotted on.

With the coast now clear, Lightning began to look for her fawn. Odd as it may seem, mother pronghorns don't watch where their fawns go to hide.

Walking slowly in the area where she had last nursed her youngster, Lightning bleated softly. Lightfoot popped up and trotted to his mother. He nursed eagerly, his tiny tail sticking straight up.



JULY

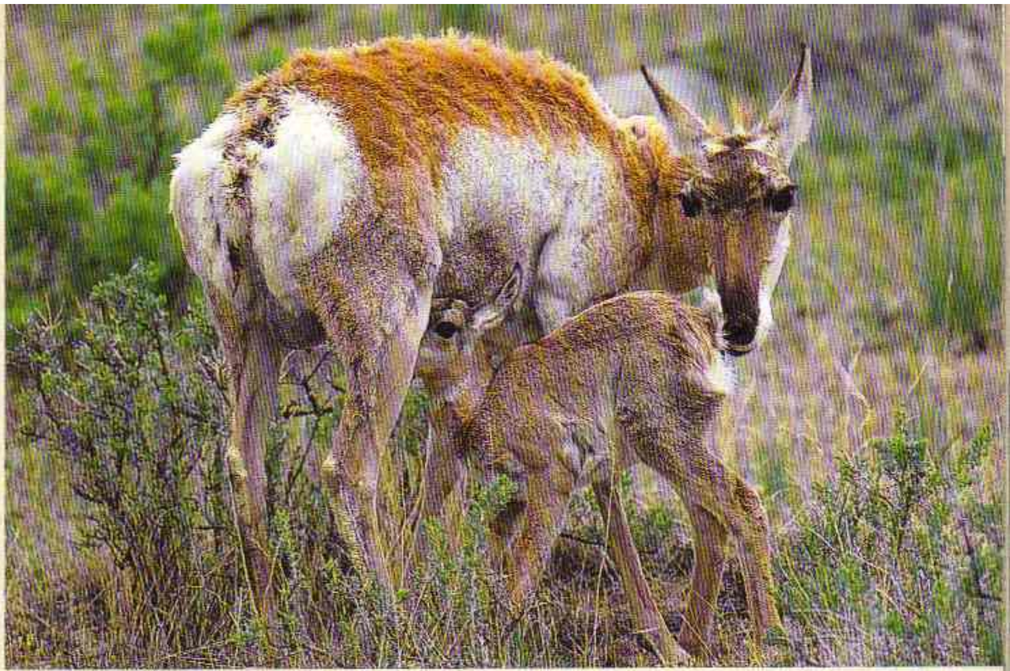
It was hot now, often very hot. Lightfoot had grown to look like a miniature adult (see photo page 26). His coat was now the tan and white of all pronghorns. He also had black cheek patches like the adult males.

Lightfoot kicked up his heels, feeling the wind against his face as he ran. He sprinted across a hillside. When fully grown, Lightfoot would be among the fastest mammals on earth. Pronghorns have been clocked at nearly 60 miles (97 km) per hour. And they can run easily for great distances at half that speed.

When Lightfoot was a few weeks old, he and his mother had joined other *does*, or females, and their fawns. Together, they all made up a *nursery herd*. Now the does lay on a low ridge. They kept watch for danger while their fawns played. Their large eyes, set high on their heads, could spot danger miles away.

The fawns chased and played with each other for hours. Even young pronghorns are "running machines." They have extra large hearts, and their huge lungs "drink the wind." They also have extra strong leg bones and special "shock absorbers" in their feet to help them run easily for miles.

When not running, Lightfoot often butted heads with other fawns. By butting and shoving, the fawns learned their places in the herd—which ones were tough



Female pronghorns, such as Lightfoot's mother (above), visit their fawns for only a few minutes a few times each day. The fawns nurse quickly, then drop back down in the brush to hide again. In a couple of weeks these two will join other mother pronghorns and fawns to form "nursery herds."

Photos by Tom & Pat Leeson (also 23); Diana Stratton and which would "back down."

Lightfoot still nursed from his mother, but not so often now. He also sampled many new foods. One day Lightfoot saw his mother nibbling the flowers of a prickly pear cactus. He nibbled at one too, being careful of the thorns.

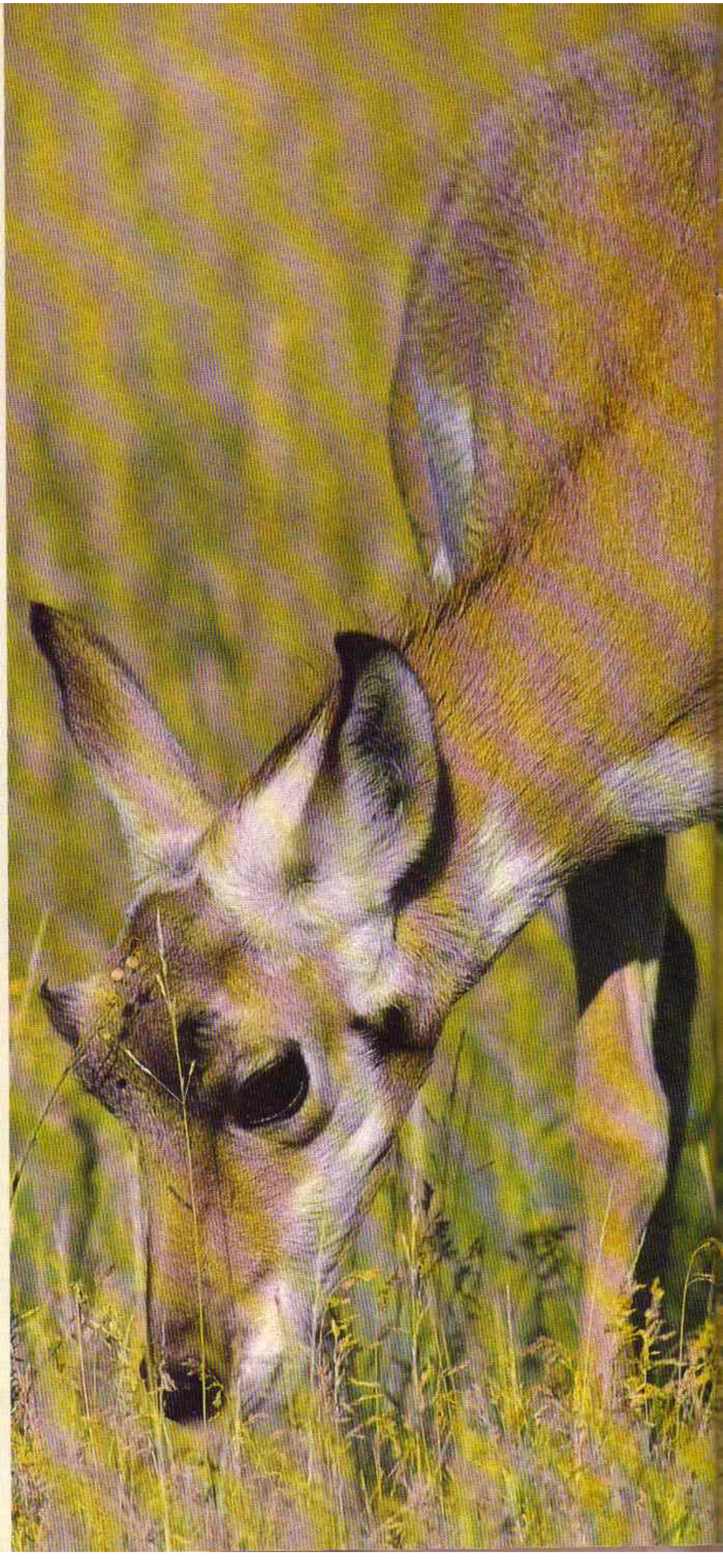
Next he nibbled at the cactus itself. To his surprise it was juicy. The flesh of these and other water-storing plants is very important to pronghorns. When there is no other water around, the water in these plants can help quench the pronghorns' thirst.

Suddenly Lightning snorted a warning to her fawn. A coyote was stalking him. The white hairs on Lightning's rump "stood up" and flashed brightly. That was the pronghorn's warning sign. In an instant, the whole herd was up and away . . . at speeds no coyote could match.

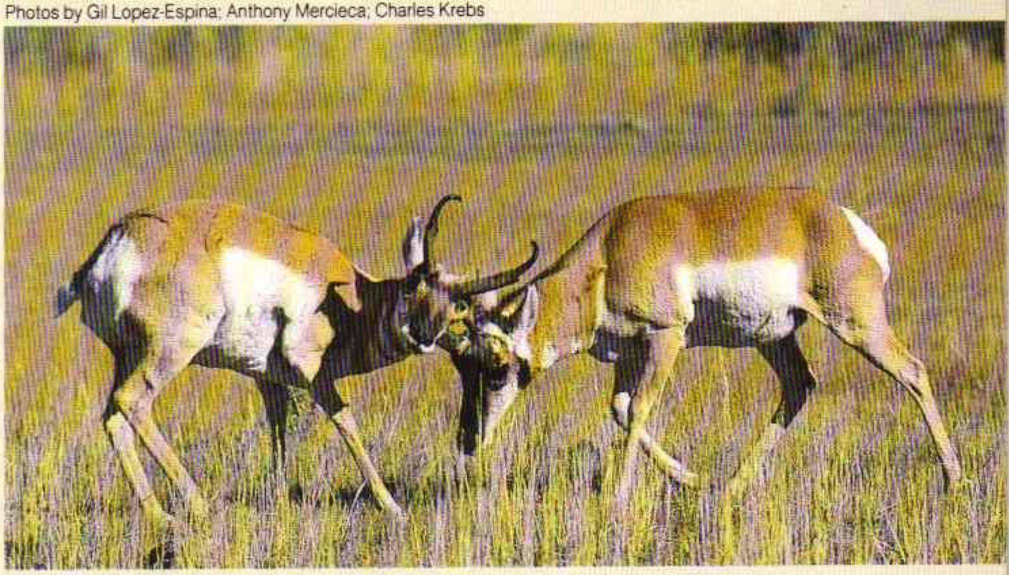
SEPTEMBER

Autumn's first snows had fallen on the mountain peaks and the seasons were changing. Lightfoot was changing too. He had sprouted tiny horns, and his mother no longer nursed him.

Lightfoot's father, Flash, wasn't paying him any attention. During the summer, Flash had herded does onto the part of the plains that was his territory. Now he herded them even more eagerly. And other bucks, or males, were definitely not welcome! Flash marched around, challenging the other males. He thrashed the



Photos by Gil Lopez-Espina; Anthony Mercieca; Charles Krebs



sagebrush and made short, quick charges. He showed off his horns and cheek patches, trying to let the other bucks know that *he* was the best.

Only the winners of these challenges would mate with the female pronghorns in their territories. This way the strongest males fathered the most fawns.

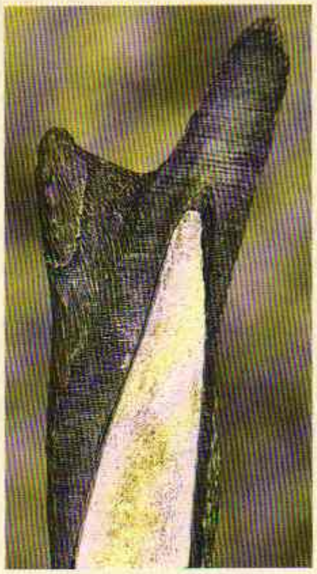
All this activity—bucks chasing bucks and mating with does—was very tiring to the bucks. Some of the older ones would not make it through the coming winter. But the does were better off. While the males raced and chased, they ate and ate. They were storing up fat for the tough times ahead.

NOVEMBER

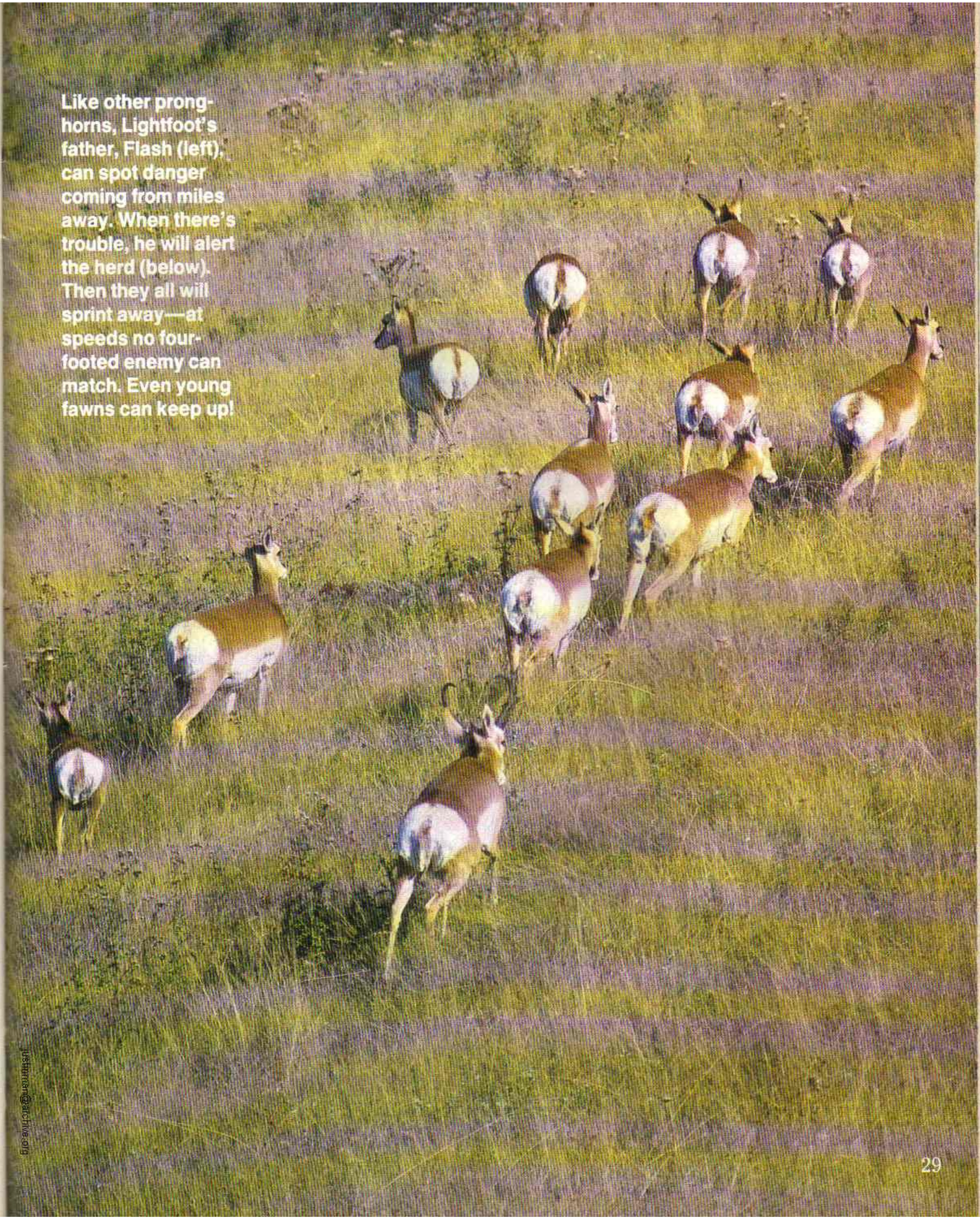
One day Lightfoot awoke to something new: A heavy snow was falling on the plains. The mating season was over and all the pronghorns—bucks, does, and fawns—had formed one huge herd. They began to move ahead of the big

(Continued on page 30)

Young Lightfoot (left) has sprouted his first horns. Adult males use horns to spar (above). Then, after mating season, they shed the dark outer *sheaths*, or coverings. New sheaths grow in each year over the bony cores (shown in cutaway below).



Photos by Art Wolfe; D. Schmidt/Valan Photos



Like other pronghorns, Lightfoot's father, Flash (left), can spot danger coming from miles away. When there's trouble, he will alert the herd (below). Then they all will sprint away—at speeds no four-footed enemy can match. Even young fawns can keep up!

justrman@archive.org

storm, to places where the snow wouldn't pile up so deeply. They would move only as far as they needed to escape the storm and find food. Water was no problem. They would get it by eating snow.

JANUARY

It was bitter cold now, the thermometer often dipping to 40° below zero. But Lightfoot and the other pronghorns didn't seem to be bothered by the cold. Their thick coats were made up of hollow hairs. Each hair was filled with air, which helped to keep the pronghorns warm.

Food was not much of a problem either. The pronghorns nibbled on sagebrush and other shrubs that stuck above the snow.

A golden eagle soared across the cold, gray sky. Spotting the body of an old pronghorn that had died during a storm, the eagle swooped down. The carcass would supply her with meals for many days.

Most of the pronghorns would survive too. They were tough. And in the spring Lightning would give birth, probably to twins this time. Flash would once again be a father. And Lightfoot would be a strong, growing pronghorn, ready to race with the wind.

Edited with the help of
A. William Alldredge

An early fall snowstorm begins to cover the pronghorns' food. As the snow gets deeper, they move on to where food is easier to find. Thick coats keep them warm. When they're thirsty, they eat snow. And when spring comes, more pronghorns will be born to race across the plains.

Photo by Jeff Foott

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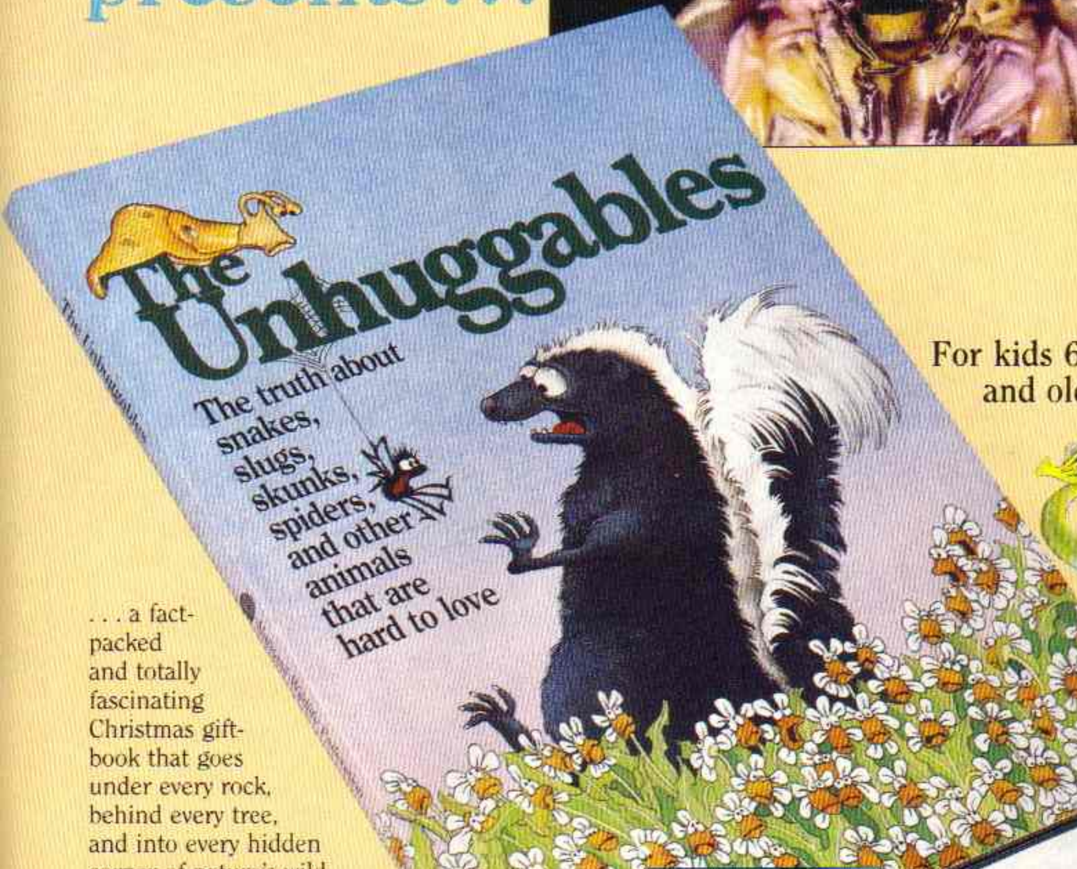

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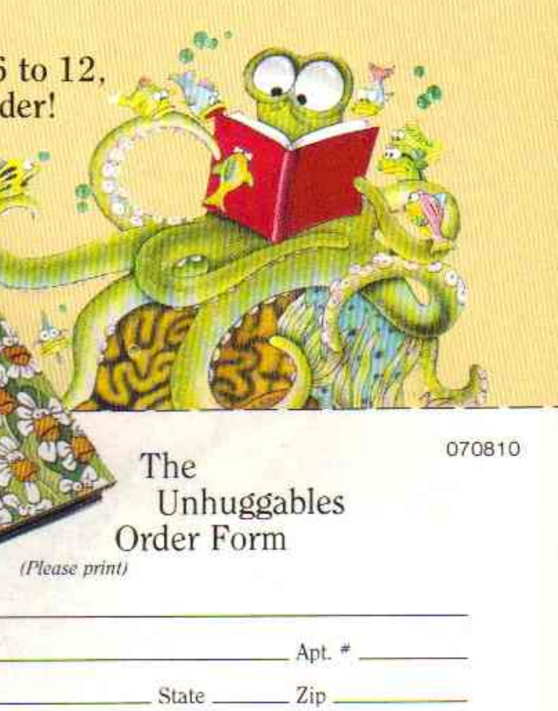

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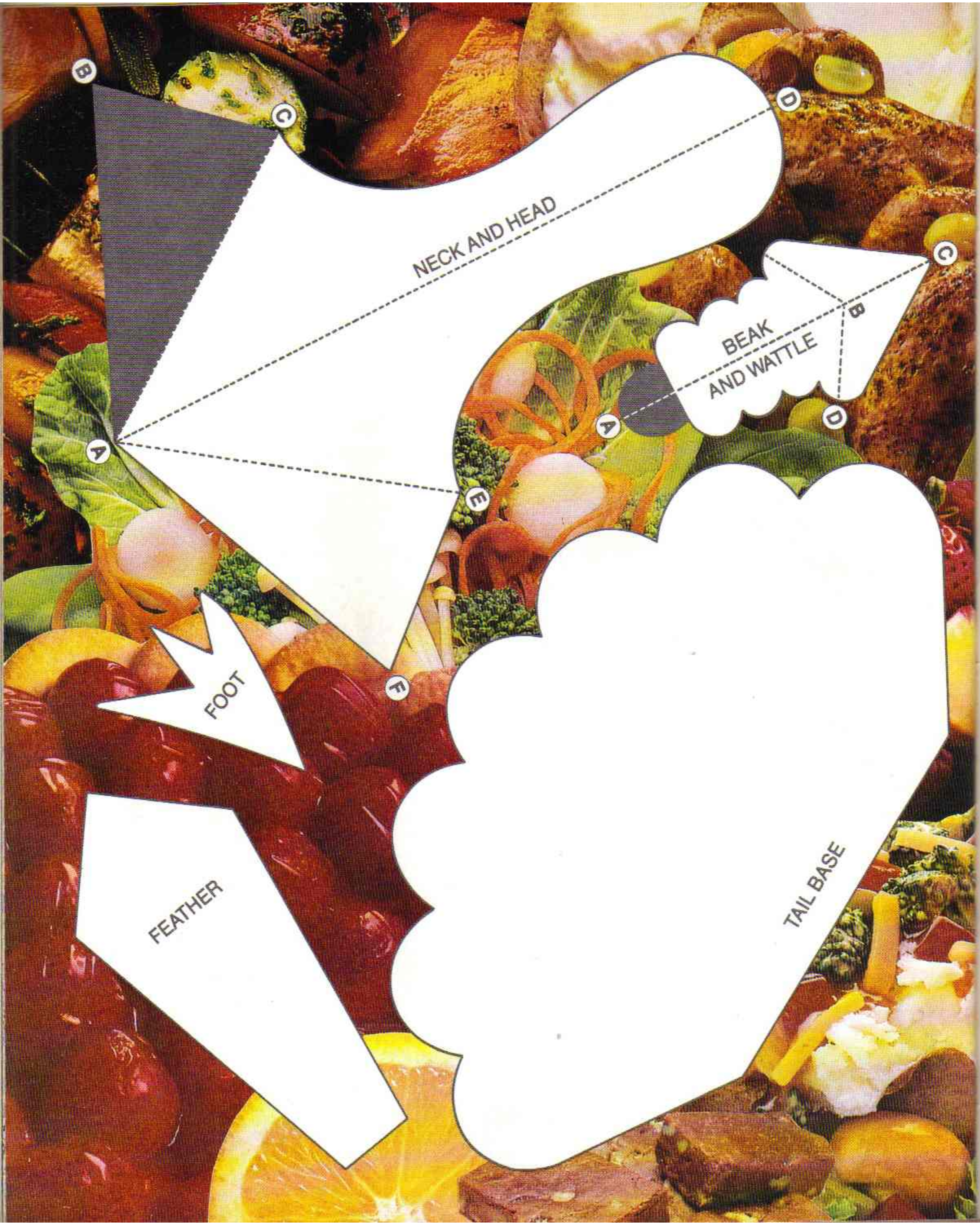
B
C
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NECK AND HEAD
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BEAK
AND WATTLE
A
D
FOOT
FEATHER
TAIL BASE

PERKY TURKEY

by Holly and Todd Ritland

This perky turkey is a treat to look at, and it can be filled with treats to eat too. Just follow these directions and everyone can gobble up the "stuffing" in *your* turkey this Thanksgiving.

What You Need:

- three sheets of 8½ × 11″ brown construction paper
- 1½ × 3″ piece of red paper
- scrap of white paper
- colored pictures of food from old magazines
- 6-ounce can of nuts **or** an empty can about 3″ tall and 3¼″ in diameter, plus treats to put in the can
- black felt-tipped pen
- white glue

What You Do:

- Cut out a strip of brown paper large enough to cover the outside of the can. Glue the paper around the can.
- Cut out a neck and head from brown paper, using the pattern shown. Fold along line AD. Then fold back along lines AC and AE. Put glue on the shaded area and cover with the triangle AEF. Now glue the neck and head to the "body" as shown at right.
- Cut out a beak and wattle from red paper. Fold in half along line AC. Fold back and forth along line AC several more times and *leave folded*. Then fold back and forth at line BD several times. (Point B is ¾″ from Point C.)
- Open the beak and wattle and draw on nostrils and a smile. Glue the shaded areas together. Fold the beak as shown. Glue the wattle to the neck and head so that it sticks out from the neck.
- Using white paper and a black felt-tipped pen, make two eyes and glue them on.
- Cut out two tail bases from brown paper, using the pattern.
- Using the feather pattern, cut out 16 feathers from magazine pictures of food. Put glue around the edges of each food feather, glue it on brown paper, and cut it out. Glue 10 feathers to one of the tail-feather bases as shown. Glue the other tail base over the bottom of the feathers. (The bottoms of the two tail bases should match exactly.) Glue the tail to the body.
- Glue 3 feathers to each side of the turkey's body for wings.
- Cut out 2 brown feet. Glue them to the bottom of the can.
- Fill the can with good things to eat. Then invite your family to gobble up the treats in your perky turkey!

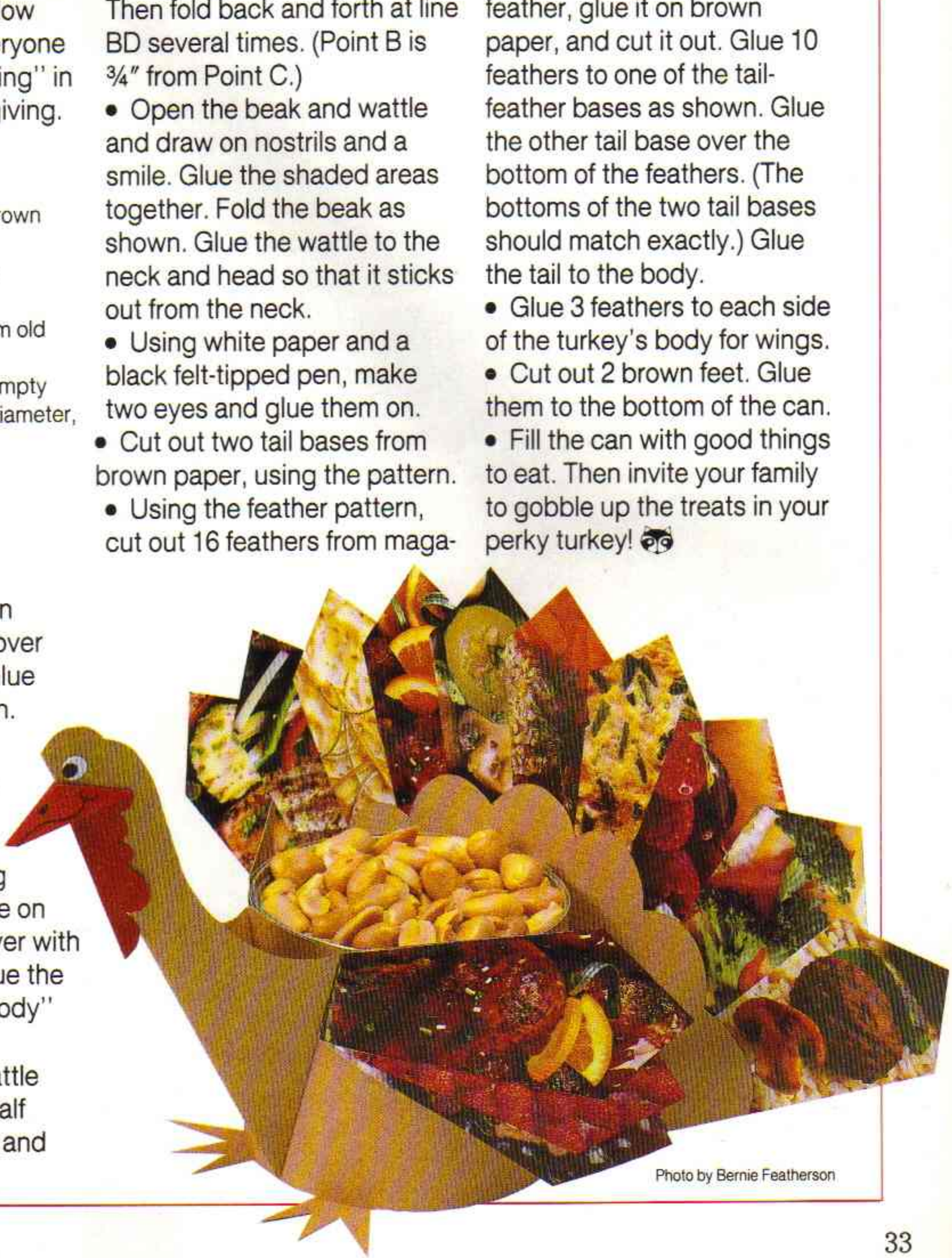
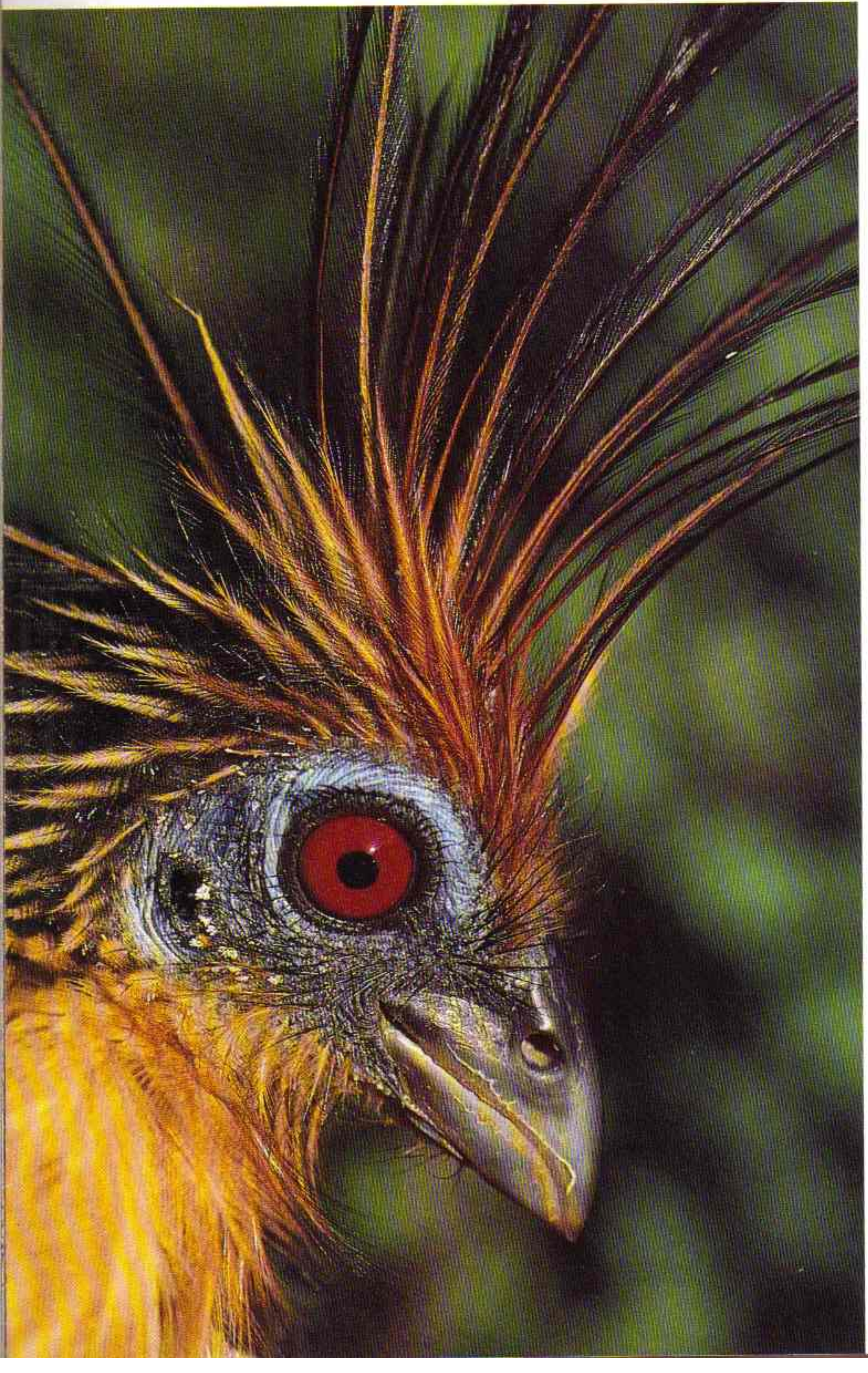


Photo by Bernie Featherson

What's a Ho-



by Stuart Strahl

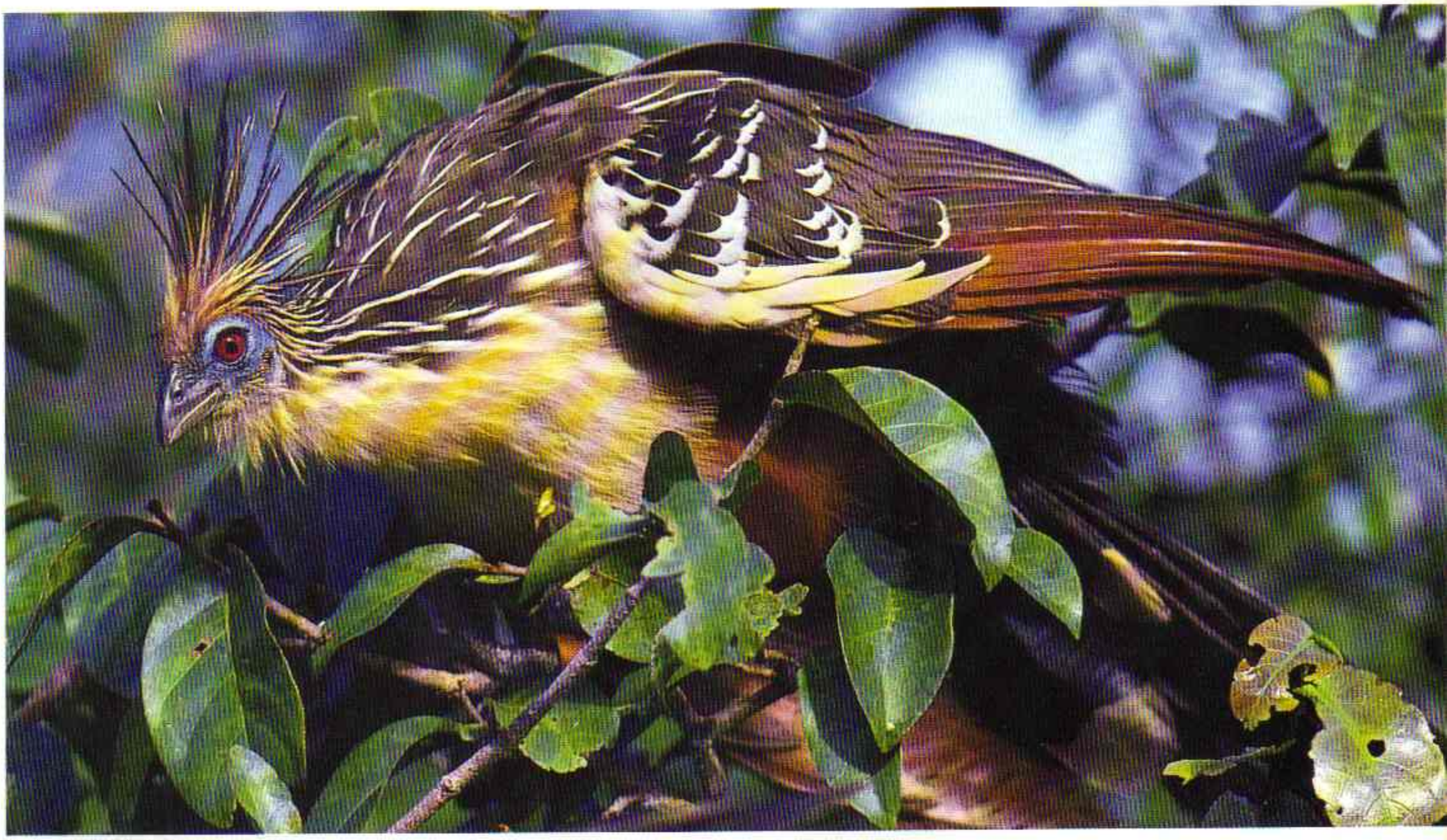
The first time I saw a *hoatzin* (ho-WHAT-sin), I was standing waist deep in a swamp in South America. I had come to Venezuela to study this very strange bird. I wanted to find out for myself if everything I'd read about it was true. So there I was, a very wet scientist, in the middle of a swamp in a rainstorm. With one hand I swatted mosquitoes. With the other I tried to steady my binoculars.

I could hear strange grunts and hisses coming from some thorny bushes. I struggled closer through the water and mud. Finally . . . what a sight! A brilliant blue head with stand-up feathers and a glowing red eye peeked out at me. Then a chicken-sized bird hopped into view. Just as I was hoping, it was a hoatzin!

Here Hoatzin, Hoatzin!

When I began my study, I decided to capture some adult birds and put metal bands on their legs. Each band would have a different number, which would help me tell one from the other. First I put up some mist nets, which are so thin they're nearly invisible. I

-WHAT-sin?



Photos by S.D. Strahl (also 38)

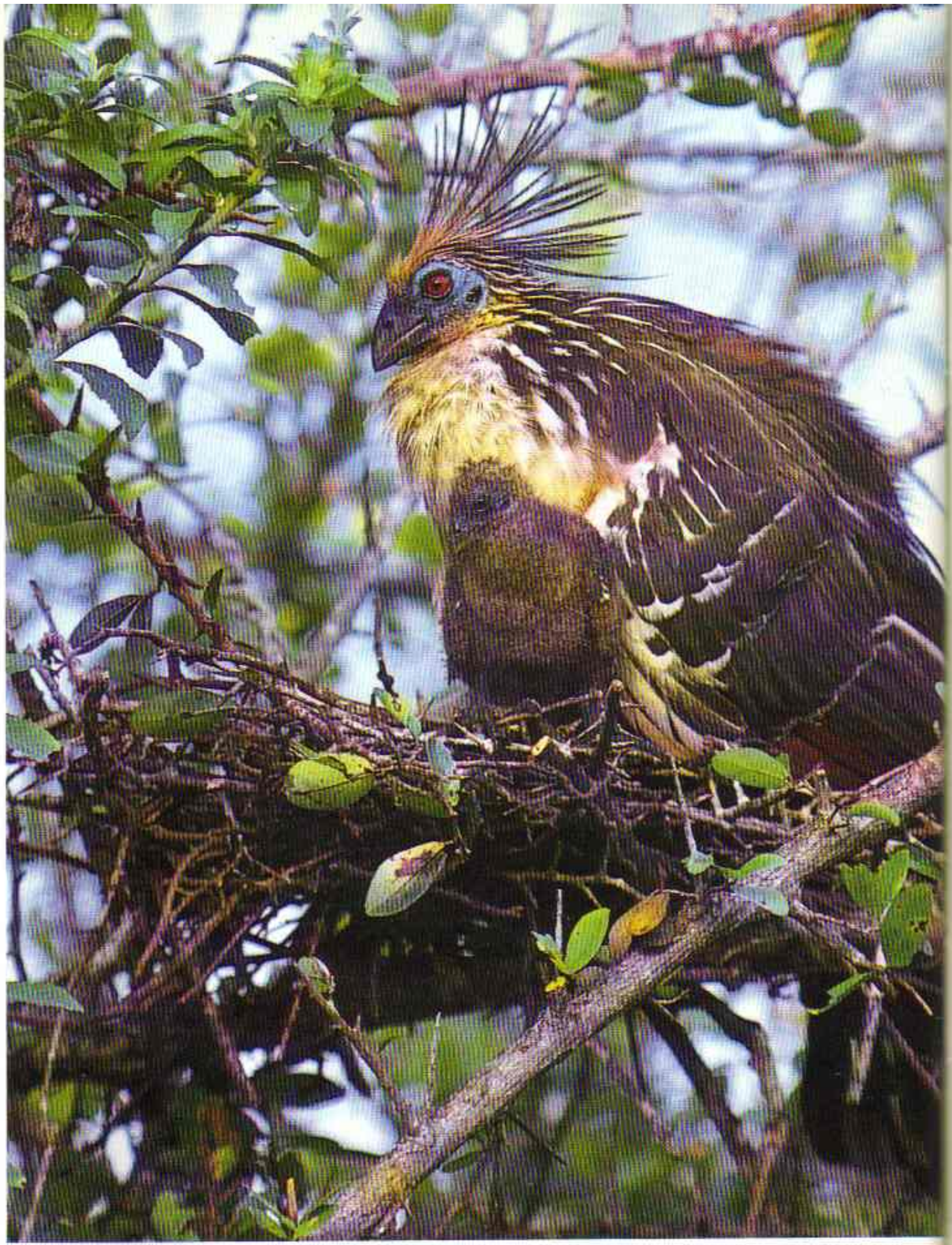
I had to go a long way to meet these strange birds with punk-rock hairdos (far left and above)—all the way to the country of Venezuela. What a struggle it was to catch my first hoatzin (left)!

stretched them between two poles in places where the hoatzins flew every day. But the birds must have seen my nets and avoided them.

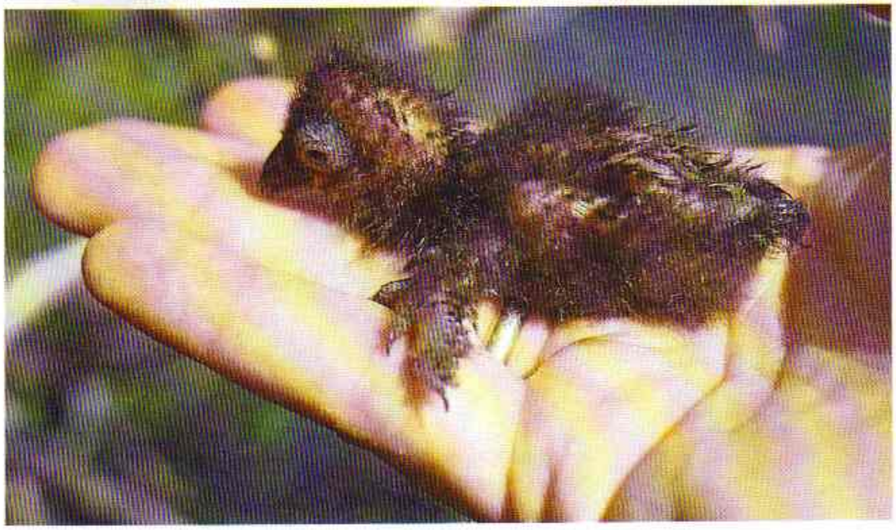
Next I tried chasing the birds into the nets. Still no luck. Then I went out in the middle of the night. This time I tried to catch them with a net attached to a long pole that I held in my hand. Failed again!

I was ready to give up. My problem was that hoatzins can see and hear better than most birds. They could spot me coming before I even got close to them. And the mist net was probably *very* easy for them to see.

Finally it dawned on me—no bird could see a mist net at *night!* So I got together with other scientists who were studying nearby. We went out at 4:00 A.M. while it was still dark. Quietly we stretched out the net. Then we woke up the birds and chased them toward



Photos by Fiona Sunquist/Tom Stack & Assoc.; S.D. Strahl



This helpless-looking chick (right) will stay at its nest (above right) for just a few days. At first one of the adults in its family watches over the chick.

it. After a lot of stumbling through mud and thorns—success! That's my picture (page 35) with the first adult we caught. Now I could get on with my work.

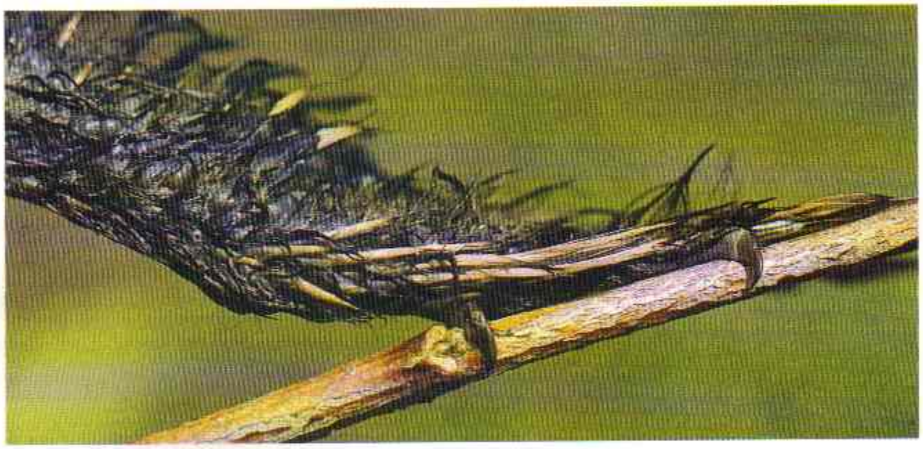
Help Is All Around

Hoatzins build messy flat nests of sticks and twigs on branches above water. They don't lay many eggs—usually no more than three. Even so, the parents get lots of help from their older "kids." They stay a part of the family flock until they are four or five years old. The older kids help with nest building, sitting on the eggs, feeding the young, and chasing away enemies. This is very unusual for birds. Most birds find a mate and raise their own families when they are one year old.

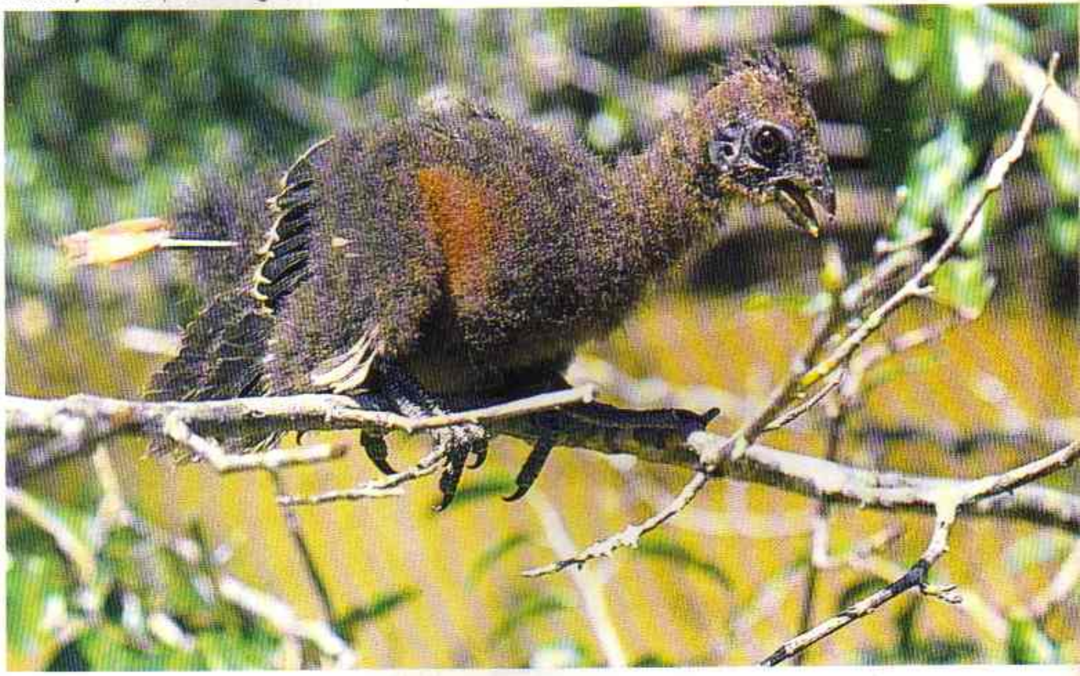
Off to a Good Start

At first, the new chicks stay in their nest and wait for their family to come and feed them. But enemies such as monkeys and snakes can easily find them there. That's why it's best if the chicks move away from the nests just as soon as they can.

By the time they are three days old, long before they can fly, the chicks are able to leave their nest. But for about another three months, they follow their family around in the trees, begging to be fed.



Photos by Alan Root/Survival Anglia; Adrian Warren/Ardea London



Wing claws for grabbing branches make hoatzin chicks really special (top). The chicks can scramble around the trees (above) long before they can fly.

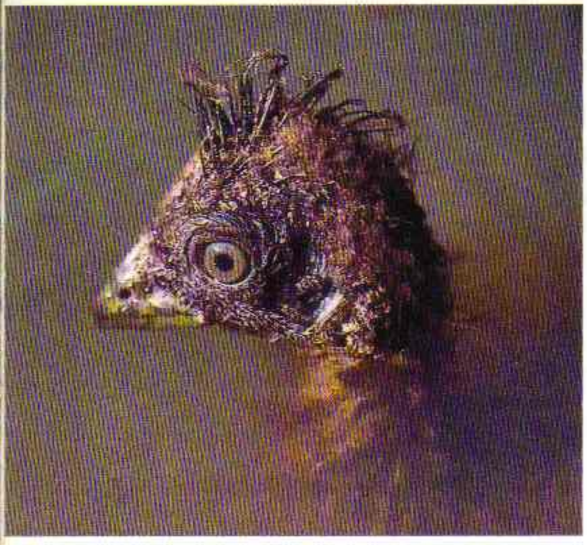
Wings That Cling

The first time I saw a hoatzin chick, I was busy watching its parents. As I moved toward them, I noticed that they were being followed by a fuzzy little black bird. The chick reached up and grabbed the branch above it . . . with its wing! Then it pulled itself up, using its wings, feet, and bill.

I was watching one of the most amazing sights in the bird world. A young hoatzin has claws on its *wings* as well as its feet. The wing claws help it hang onto the branches. By using these wing claws, a young hoatzin is able to climb around in the trees when it's only three days old!

A Dinosaur Connection?

For many years, people thought that the hoatzin was a close relative of *Archaeopteryx* (are-key-OP-ter-ix), the first bird on earth. The *Archaeopteryx* lived at the time of dinosaurs and had claws on its wings something like the hoatzin's. But today scientists no longer believe that the two birds are related. They now think that hoatzins developed their wing claws after millions of years of trying to escape from enemies.



Before it can fly, a hoatzin chick knows how to swim. And it's a good thing it does—diving into water is a great way for it to escape from its enemies.

Better Wet Than Dead

Climbing around can't always save a young hoatzin from harm. If it sees an enemy creeping up, the baby hoatzin dives into the water under its tree (photo at left). When the enemy is gone, the hoatzin swims to shore. Then it climbs back up into the branches.

Lots and Lots of Leaves

Hoatzins eat nothing but leaves, which is strange for a bird. Most birds eat seeds, insects, small mammals, or water animals. This food gives them quick energy. It takes a longer time to get energy from leaves, because they are hard to digest.

To help digest the leaves, a hoatzin has an extra "stomach," called a *crop*, in its throat. Many birds have crops where they store food for a while. But a hoatzin's crop is special. It makes juices that break down some of the leaves before they get to the hoatzin's regular stomach. This makes it possible for a hoatzin to get all the energy it needs from leaves.

Strange Sounds

The calls of hoatzins are weird. In fact, they don't sound like birds' calls at all. They usually sound more like a bunch of barnyard animals stuffed inside a paper sack! They go *brrrr-uh!* when they're fighting. When calling to other members of their family, they go *uh-uh-uh*, like the soft honking of a goose. Sometimes they moan or bark or make sounds like a human baby: *waaaaaah!*

Flying at Long Last

Young hoatzins learn to fly about six weeks after they leave the nest. But they don't learn to fly *well* until they're about four months old. Even adults don't *have* to fly very far. Their food is nearby, so they stay close to home.

Soon after the young birds can fly, their wing claws drop off—they don't need the claws for crawling around trees anymore.

Watching Lots of Hoatzins

In the past six years, I've watched over 400 hoatzins grow up. That first little chick I saw so bravely following its parents is now an adult with young of its own.

So when will I *stop* studying hoatzins? Not till someone tells me about a creature that is stranger than *this* one—a bird with a stomach in its throat and wings that cling!

I Like Ike!

by Olga A. Piilo; drawings by Linda K. Powell

The first time I saw Ike, he was sunning himself on the woodpile in my yard in Michigan. His reddish brown body—all six inches (15 cm) of it—was stretched out on a log. The dark and light stripes on his back were so straight that they seemed to be painted on (**see photo page 3**). And the stripes around his big black eyes told me that Ike was an *Eastern chipmunk.*

Ike sat up and began cleaning himself. He licked his front paws, then rubbed them over his face again and again. Lowering his head, he stroked his white belly with his tongue. Then he twisted his body around and licked his fur on one side, right down to his rump. He didn't stop twisting and licking until all parts of his body were clean. Finally, he combed his tail by running it through his teeth. His fur gleamed in the hot summer sun.

Suddenly Ike stopped moving. Then he huddled closer to the log, wrapped his tail around his hind paws, and hugged his chest with his front paws. His bright black eyes and tiny ears were alert. He had heard something . . . and off he dashed in long, leaping bounds. Just then I saw a huge tabby cat that must have had Ike in mind as a snack. Luckily, Ike had seen the cat before it could attack him!

IKE UNDERGROUND

The first few times that Ike dashed away, I watched where he went. He always disappeared behind the woodpile or into a nearby clump of bushes.

I've read that chipmunks often use two different kinds of burrows. One burrow is very simple—a tunnel, a small "room," and a door. That's the chipmunk's hideaway. The other, bigger burrow is the chipmunk's "home." It has several tunnels, three or more rooms, and more than one entrance.

Ike might have been using the home burrow of a chipmunk that lived here before. Or he might have dug his own. Whether his burrow

was old or new, he probably kept digging new tunnels and rooms all summer.

I never saw Ike "at work," but I know that chipmunks are great dirt-diggers. They dig with their strong, curved claws and take bitefuls of dirt with their sharp teeth. They kick with their hind paws to get the dirt out of the way. Or they use their noses like bulldozers to shove the dirt out of the tunnel.

If Ike dug his own burrow, he probably did it the way most chipmunks do: He began by digging a hole just barely big enough for his body. Then he dug a tunnel downhill until he was about three feet (1 m) underground. After that, the tunnel leveled out, and every couple of feet Ike dug out a room the size of a shoe box.

Ike collected dried leaves and piled them up in the largest room for his bed. He either put layers of leaves on the floor or put them on top of a pile of nuts and other seeds. He stored food in most of the other rooms.

IKE ABOVE GROUND

All through the summer, Ike would disappear during the hottest part of the afternoon. But the rest of the time he was back in my yard looking for food. I heard him chattering as he scampered around. That was when I put out a treat for him—sunflower seeds. I loved to sit on the porch and watch as he hauled them all away.

Ike had a hollow pouch inside each cheek. He'd stuff one pouch with over a dozen sunflower seeds and then stuff the other. He'd twitch his tail a few times, twitter a cheery *chip-chip-chipperee,* and skitter away to his burrow.

SLEEP TIGHT, IKE

As the weather got cooler and the leaves started to change color, I noticed that Ike came out only during warm, sunny afternoons. And he seemed busier than ever collecting food. He'd run a short way, stop, look, and listen. Then he'd dart on in his never-ending search for acorns and other seeds.

One morning in late November I woke up and heard the wind blustering outside. Through my bedroom window I could see a thick blanket of snow covering the woodpile. As I snuggled back down into my covers, I thought of Ike curled snugly on *his* bed.

Ike probably will stay in his warm burrow all winter. He'll wake up from time to time, eat a few seeds, and go back to sleep. There's a chance he might come out on an unusually warm day. But I've never seen a chipmunk during our long winters in Michigan. So as I listened to the wind howl, I whispered "Sleep tight, Ike. I'll see you in the spring."

WHAT'S HAPPENING?

HOME FOR HUMPBACKS

Humpback whales that spend the summer in the northern Atlantic Ocean are on their way to warmer waters. They are heading for their winter homes in the Caribbean Sea. About 3000 of them will go to an area called Silver Bank, off the coast of the country called the Dominican Republic.

Two years ago the government of the Dominican Republic set aside this area as a safe place for these endangered whales. Humans will not be allowed to do anything in the area that might harm or upset the humpbacks. So the whales can mate and take care of their calves without being bothered.

CALLING ALL QUACKERS

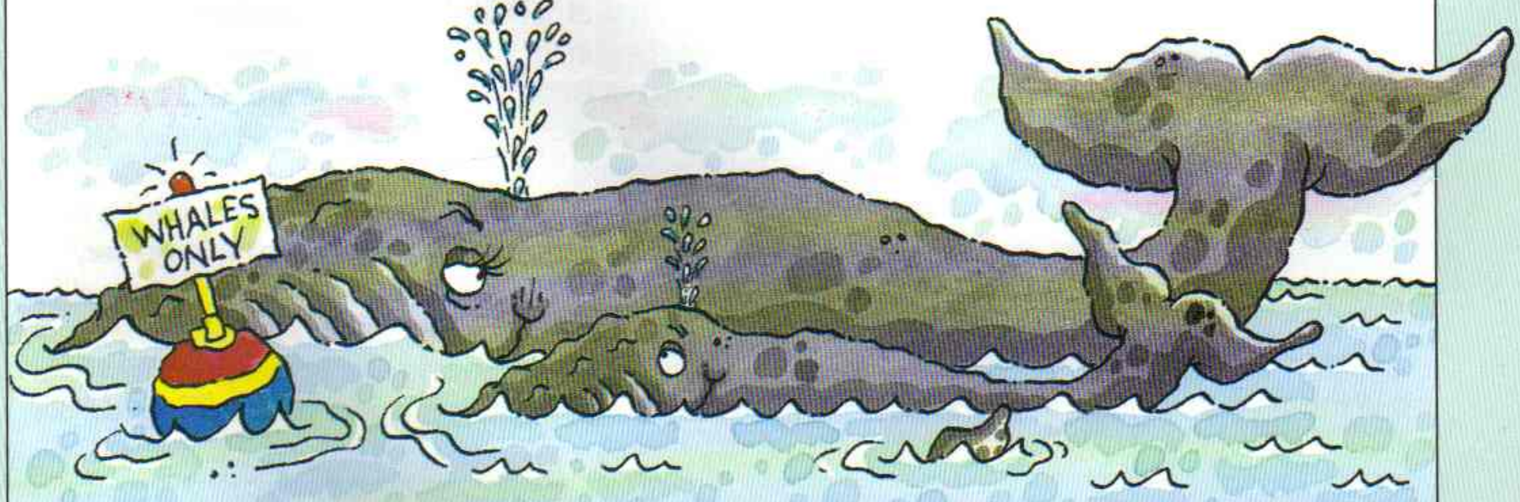
People in Stuttgart, Arkansas, go *quackers* over ducks this time of year. They throw a week-long party to welcome millions of ducks that spend the winter in rice fields outside of town.

Lots of kids come to the duck party to enter the Junior World Championship Duck Calling Contest. To call ducks, they don't dial a phone or yell "Hey, duck!" They use special whistles that sound like duck greetings, mating calls, and feeding chatter. Judges who are expert duck callers choose the winners.

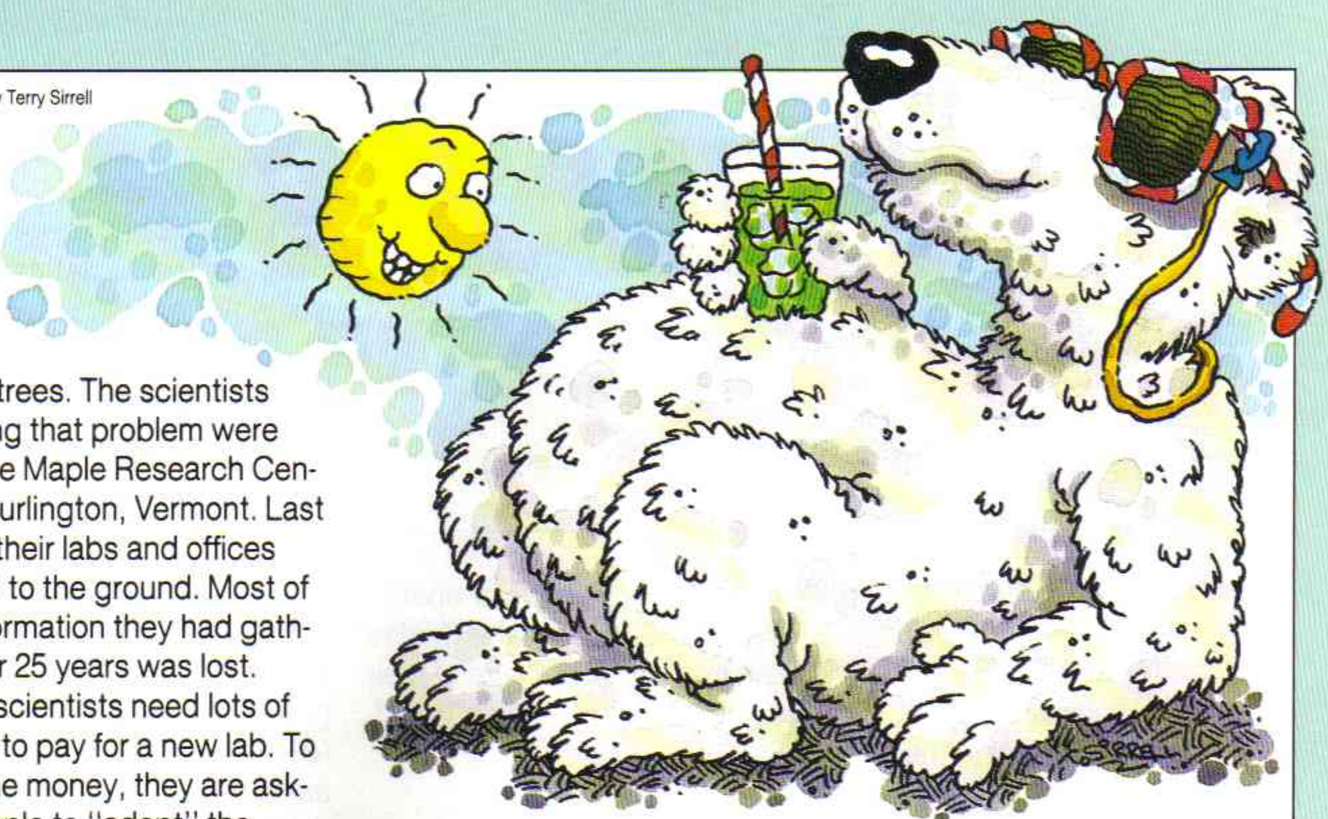
Brandon Bauman, 13, won the 1987 contest. Soon he'll find out if anyone can out-quack him this year!

VERMONT'S MAPLE TREES NEED YOU!

"No More Maple Syrup," a story in the February 1988 *Ranger Rick*, was about how acid rain might be harming



Drawings by Terry Sirrell



maple trees. The scientists studying that problem were from the Maple Research Center in Burlington, Vermont. Last winter their labs and offices burned to the ground. Most of the information they had gathered for 25 years was lost.

The scientists need lots of money to pay for a new lab. To raise the money, they are asking people to "adopt" the 20,000 maple trees that they have been studying. You and your friends can adopt one tree for $25. In return, you'll get a certificate and a map that shows you where to find "your" tree.

For more information, write:
Adopt-a-Tree
University of Vermont
Burlington, VT 05405-0086

SOLAR POLAR BEAR

The polar bear has a secret that might help us use solar energy in a better way. Somehow the bear's fur collects lots of sunlight that then heats its black skin. That's one way that the bear stays warm in its icy cold world.

People already know how to build solar collectors that can heat buildings. But our collectors don't work nearly as well as the polar bear's fur does. So scientists are working hard to figure out the bear's super solar secret!

CALIFORNIA CONDORS FLY AGAIN?

California condors were dying out in the wild. So in 1986, the last few were caught and put in zoos in Los Angeles and San Diego. Scientists at those zoos have now begun to raise more condors to put back into the wild. But there's one big question: Will zoo-raised condors survive on their own?

To find out the answer, the scientists are working with *Andean condors,* South American cousins of California condors. They've raised a few of these birds in zoos and are training them to live in the wild. What they find out will help them return California condors to their wild homes. It's our best chance to save these birds from becoming extinct.

RANGER RICK'S A WINNER!

Each year, the Educational Press Association of America looks at many kinds of magazines from all across the country. Some of the magazines are for kids. Some are for grown-ups. And they cover every subject you can imagine.

Finally, the judges pick the magazine they think is the very best as the winner of their Golden Lamp Award. This year the big winner was your very own magazine, *Ranger Rick!*

Ride a Jelly Submarine

Story and photos by Kathy and Ron Larson

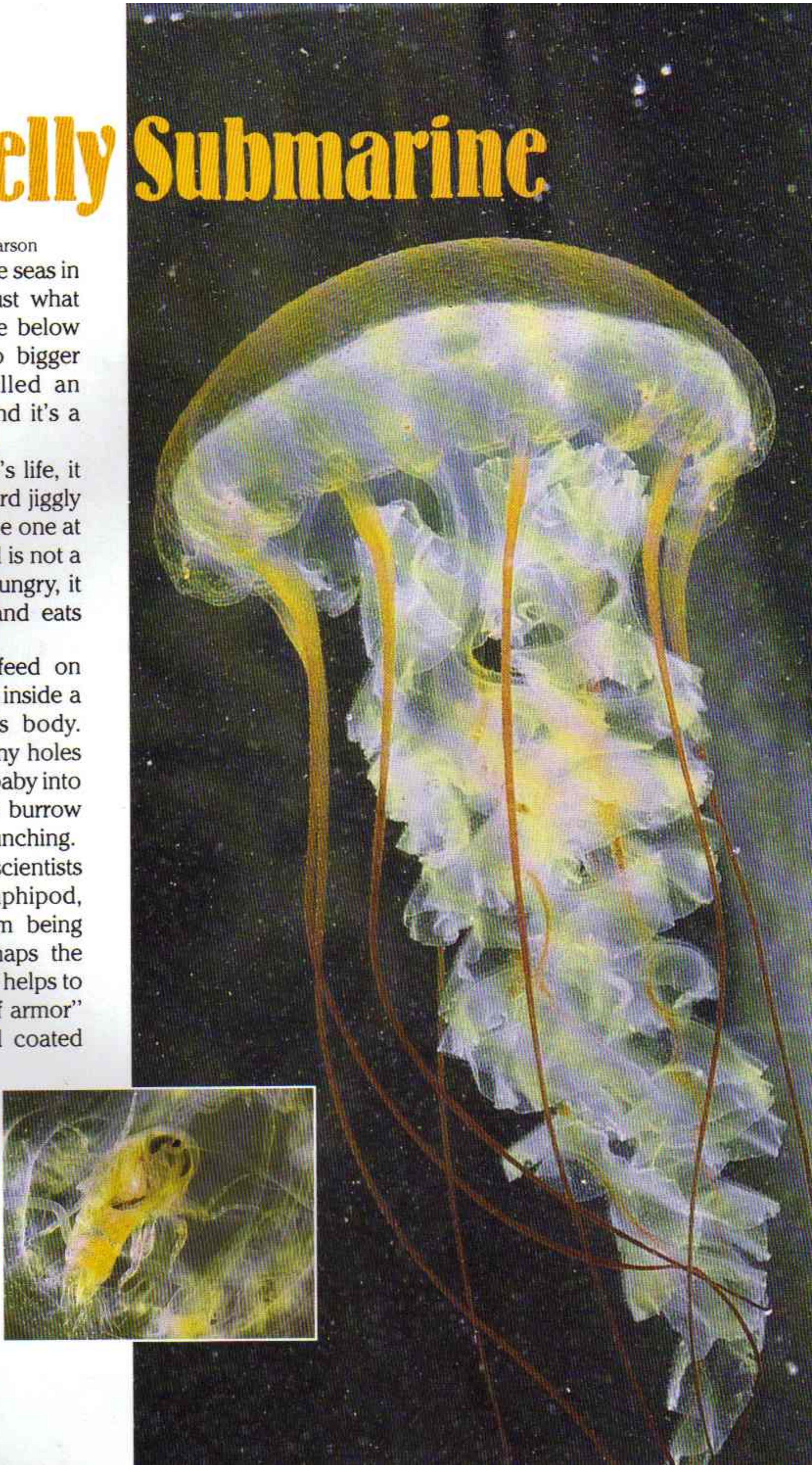
Can you imagine sailing the seas in a jelly submarine? That's just what the big-eyed, crusty creature below does! This tiny sailor is no bigger than a lima bean. It's called an *amphipod* (AM-fuh-pod), and it's a cousin of crabs and shrimps.

For part of the amphipod's life, it cruises the cold ocean aboard jiggly jellyfish "submarines" like the one at right. But the little amphipod is not a welcome guest: When it's hungry, it burrows into the jellyfish and eats its insides.

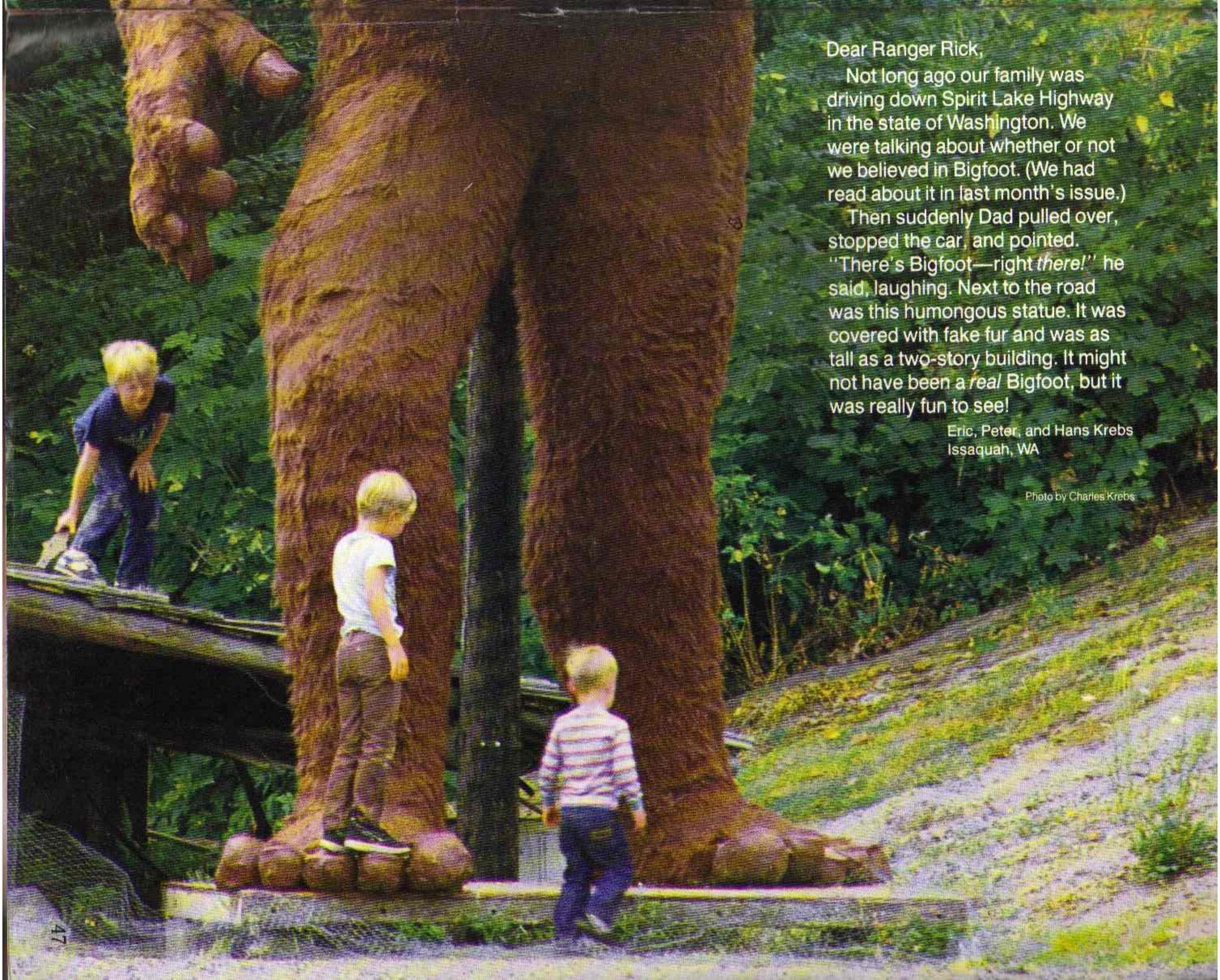
The amphipod's young feed on the jellyfish too. They hatch inside a pouch on the amphipod's body. Later, the amphipod bites tiny holes in the jellyfish and puts one baby into each hole. Then the babies burrow into the jellyfish and start munching.

There are many things scientists don't know about the amphipod, such as how it keeps from being stung by the jellyfish. Perhaps the amphipod's hard outer crust helps to keep it safe. For this "suit of armor" is as tough as toenails and coated with lots of wax.

Scientists also wonder why the amphipod eventually leaves its jelly submarine and swims away. All they know is that after a while another jellyfish will come drifting along. And then the crusty rider will ride again!



WE FOUND
BIGFOOT!



Dear Ranger Rick,

Not long ago our family was driving down Spirit Lake Highway in the state of Washington. We were talking about whether or not we believed in Bigfoot. (We had read about it in last month's issue.)

Then suddenly Dad pulled over, stopped the car, and pointed. "There's Bigfoot—right *there!*" he said, laughing. Next to the road was this humongous statue. It was covered with fake fur and was as tall as a two-story building. It might not have been a *real* Bigfoot, but it was really fun to see!

Eric, Peter, and Hans Krebs
Issaquah, WA

Photo by Charles Krebs